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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

E. LESTER JONES, SUPERINTENDENT

RESULTS OF OBSERVATIONS MADE AT THE UNITED STATES
COAST AND GEODETIC SURVEY MAGNETIC OBSERVATORY
AT VIEQUES, PORTO RICO
1913 AND 1914

BY

DANIEL L. HAZARD

Chief, Division of Terrestrial Magnetism



WASHINGTON
GOVERNMENT PRINTING OFFICE
1916

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RESULTS OF OBSERVATIONS MADE AT THE UNITED STATES COAST AND GEODETIC SURVEY MAGNETIC OBSERVATORY AT VIEQUES, PORTO RICO, IN 1913 AND 1914.

INTRODUCTION.

Latitude $18^{\circ} 08' 8''$ N. Longitude $65^{\circ} 26' 9''$ W. Elevation 20 meters (65 feet).

In February, 1903, a magnetograph was installed in a room in Fort Isabel Segunda, on Vieques Island, Porto Rico, and variation observations were continued there until April, 1907. At that time suitable buildings had been constructed for the observatory work and the magnetograph was transferred to the new site, about five-eighths of a mile (1 kilometer) west of the old fort. A general description of the new buildings will be found in the "Results for 1907 and 1908."

The direct supervision of the magnetic work of the Coast and Geodetic Survey was assigned to an assistant to the superintendent, designated "inspector of magnetic work." This position was held by R. L. Faris from September, 1906, to September, 1914, and after that date by A. Braid. The work of the Porto Rico Observatory was in charge of the following magnetic observers: F. Neumann, January, 1913, to March, 1914; Harold W. Pease, April to December, 1914. The office computations and preparation of the results for publication were in charge of the writer, assisted by J. M. Seybolt and O. S. Hill, computers.

INSTRUMENTS.

VARIATION INSTRUMENTS.

The magnetograph is of the Eschenhagen pattern and consists of D , H , and Z variometers mounted east of the recording apparatus. Increasing ordinates (upward motion of the curves) correspond to increasing west declination, increasing H , and increasing Z .

Variations in temperature were obtained from the record of the thermograph inclosed in the Z variometer. The seasonal variation was small, but there was a fairly regular diurnal variation of about half a degree centigrade, the maximum occurring shortly before midnight and the minimum shortly before noon.

Monthly and annual range of temperature (centigrade).

Month	1913			1914		
	Maximum	Minimum	Range	Maximum	Minimum	Range
January.....	25.7	24.4	1.3	25.8	23.2	2.6
February.....	25.6	24.2	1.4	26.4	23.9	2.5
March.....	25.7	24.5	1.2	27.1	24.4	2.7
April.....	26.7	23.9	2.8	27.4	25.8	1.6
May.....	27.1	24.9	2.2	28.1	26.5	1.6
June.....	28.1	26.8	1.3	28.0	26.5	1.5
July.....	28.4	26.9	1.5	28.6	27.1	1.5
August.....	28.3	26.5	1.8	29.0	27.5	1.5
September.....	28.9	27.1	1.8	29.5	28.2	1.3
October.....	28.2	25.6	2.6	29.4	27.5	1.9
November.....	27.5	25.7	1.8	28.2	26.7	1.5
December.....	26.3	24.8	1.5	28.5	25.7	2.8
Year.....	28.9	24.2	4.7	29.5	23.2	6.3

ABSOLUTE INSTRUMENTS.

India Magnetic Survey pattern magnetometer No. 31. Schulze earth inductor No. 1.

SEISMOGRAPH.

A Bosch-Omori seismograph was kept in continuous operation. The recorded disturbances will be found tabulated on pages 100-102.

TIME.

Time observations were made about once a week with a sextant, using the method of equal altitudes of the sun.

CONSTANTS OF THE MAGNETOGRAPH.

DECLINATION.

Scale value.—One millimeter on the magnetogram = $1'.02$.

HORIZONTAL INTENSITY.

Scale value.—Deflection observations at two distances for the determination of the scale value of the H variometer were made about once a month. The results for the greater part of the two years show a variation of scale value with ordinate represented by the formulas:

$$\begin{aligned}\epsilon_h &= 2.88\gamma + 0.005h \dots \text{January 1 to 25, 1913.} \\ \epsilon_h &= 2.65\gamma + 0.005h \dots \text{January 26 to July 24, 1913.} \\ \epsilon_h &= 2.60\gamma + 0.005h \dots \text{July 24 to December 31, 1913.} \\ \epsilon_h &= 2.59\gamma + 0.005h \dots \text{January to December, 1914.}\end{aligned}$$

In July, 1913, the magnet was apparently slightly obstructed at the time of the deflection observations, though probably free through the range of the ordinary diurnal variation. From the middle of November to the middle of December, 1914, the magnet was apparently not entirely free, as shown by the large scale value on November 30 and decreasing amplitude of daily motion, and a gradual increase in scale value from 2.68γ on November 1 to 3.14γ before the adjustment on December 17 has been assumed.

 H scale value.

Date	h	Observed	Computed	Date	h	Observed	Computed
1913.	mm	γ	γ	1914.	mm	γ	γ
Jan. 23	45.1	3.11	3.11	Jan. 6	29.8	2.82	2.74
Jan. 28	7.8	2.70	2.69	Feb. 7	21.8	2.83	2.70
Feb. 15	32.8	2.80	2.81	10	23.7	2.73	2.71
27	(12.0)	2.72	2.71	Mar. 7	12.7	2.65	2.65
Mar. 29	37.9	2.84	2.84	26	19.6	2.67	2.69
Apr. 30	44.6	2.87	2.87	May 6	18.5	2.66	2.68
May 31	7.2	2.68	2.69	30	25.6	2.72	2.72
June 5	1.1	2.66	2.66	June 30	19.6	2.70	2.69
July 1	4.6	3.24	2.67	July 31	10.2	2.66	2.64
17	12.4	4.36	2.71	Aug. 14	13.4	2.65	2.66
Aug. 4	26.4	2.75	2.73	Sept. 26	4.8	2.64	2.61
Sept. 4	12.9	2.67	2.66	Oct. 17	20.7	2.68	2.69
Oct. 7	15.4	2.66	2.68	Nov. 30	11.7	3.09	2.97
Nov. 4	23.7	2.72	2.72	Dec. 23	53.0	2.85	2.86
Dec. 4	33.2	2.76	2.77				

Temperature coefficient.—The same value was used as in previous years, namely, $q = 0.00026$ or 7.5γ for 1°C .

VERTICAL INTENSITY.

Scale value.—Deflection observations at two distances were made at least once a month. A factor of the form $\left(1 + \frac{P}{r^2}\right)$ was introduced in the computation formula to take account of the dissimilarity of the D and Z magnets. The value $P=44.4$ was computed from 60 sets of deflections between January, 1907, and November, 1912, and was used for the reduction of the observations of 1911 and 1912. Special deflection observations at various distances were made in February and March, 1913, to test the correctness of the adopted value of P . The February observations indicate that the old value is satisfactory, while those in March were not arranged properly to furnish conclusive evidence. It has been decided, therefore, to use the old value of P for 1913 and 1914.

Adjustments causing a change of scale value occurred on July 1, 2, 17, 24; August 26; September 4; October 7; December 10, 18, 1913. January 6; February 5, 7, 26; April 28; May 21; June 8, 24; July 14; October 22; November 7, 14; December 7, 1914. From July 15 to October 22, 1914, there appears to have been a steady increase of scale value. The same is true for the period from December 7, 1914, to the end of the year.

Z scale value.

Date	Short distance	Long distance	Adopted	Date	Short distance	Long distance	Adopted
1913.	γ	γ	γ	1914.	γ	γ	γ
Jan. 23	4.06	3.71	3.79	Jan. 6	2.75	2.78	2.78
Feb. 21	3.67	3.67	3.79	Feb. 4	3.54	3.54	3.54
24	3.75	3.75	3.79	7	4.04	4.10	4.07
26	3.87	3.90	3.79	9	3.48	3.53	3.51
Mar. 29	3.64	3.76	3.79	Mar. 7	3.10	3.15	3.13
Apr. 30	3.76	3.90	3.79	May 6	6.12	6.03	6.15
May 31	3.87	3.86	3.79	16	6.27	6.20	6.15
July 1	3.59	3.58	3.58	26	8.74	8.65	8.69
5	4.43	4.40	4.41	June 11	7.09	7.08	7.09
17	4.60	4.59	4.59	July 13	8.33	8.25	8.29
Aug. 4	4.68	4.61	4.65	22	6.27	6.27	6.29
Sept. 4	13.07	13.34	13.20	Aug. 14	6.38	6.43	6.40
10	3.65	3.68	3.65	Sept. 25	6.48	6.49	6.54
Oct. 7	3.62	3.64	3.65	Oct. 16	6.74	6.72	6.71
9	1.57	1.58	1.57	24	10.59	10.62	10.60
Nov. 4	1.59	1.60	1.57	Nov. 11	12.43	12.54	12.50
Dec. 4	1.54	1.55	1.57	19	13.79	13.50	13.60
18	1.89	1.86	1.88	Dec. 7	10.95	11.16	11.10
23	2.78	2.81	2.79	31	12.14	12.21	12.20

Temperature coefficient.—An attempt was made to redetermine the Z temperature coefficient from a comparison of the daily mean ordinates for short periods during which there was both a rise and fall of temperature. However, the changes of temperature were so small and the changes of adjustment of the variometer were so numerous that the results were not accordant and it was concluded to use the same value as in 1912, namely, $q=0.00023$ or 8γ for 1°C .

ABSOLUTE OBSERVATIONS AND BASE-LINE VALUES.

DECLINATION.

Absolute observations of declination were made twice a week. At times the *D* variometer was affected by changes in the adjustment of one of the other variometers. Changes of base-line value due to this or other causes occurred as follows:

Abrupt changes of D base-line value.

Date	Hour	Amount	Cause
1913.			
Jan. 25	8- 9	+2.7	<i>H</i> variometer removed.
25	15-18	-4.9	<i>H</i> variometer replaced.
Mar. 4	7-11	+4.3	Adjusted and cleaned <i>D</i> .
May 15	2- 3	+1.4	Disturbed by earthquake.
27	8- 9	-0.5	Cause unknown.
27	10-11	+1.8	Examined <i>D</i> .
1914.			
Feb. 4	10-11	-0.4	Scale-value deflections.
5	9-10	+3.0	Adjusted <i>D</i> .
5	15-17	+8.1	Inserted new fiber and ad- justed <i>D</i> .
26	10-11	+2.3	Adjusted <i>D</i> .
Aug. 14	9-10	+1.0	<i>Z</i> scale-value deflections.
14	13-14	+1.6	<i>H</i> scale-value deflections.

At other times there is evidence of drift, not always in the same direction. The scale-value deflections indicate that from the end of April to the middle of July, 1913, in December, 1913, and in January, part of July, and part of August, 1914, the *D* magnet was not entirely free. From June 27 to July 16, 1913, the record was evidently unreliable and has been rejected. For the other periods the motion of the magnet appeared to be free within the limits of the ordinary diurnal variation, and the record has been retained.

Declination base-line values.

Date	Observed	Adopted	Date	Observed	Adopted	Date	Observed	Adopted
1913.	° /	° /	1913.	° /	° /	1914.	° /	° /
Jan. 21	2 30.8 W.	2 30.6 W.	Sept. 22	2 38.2 W.	2 38.0 W.	Apr. 27	2 54.4 W.	2 53.8 W.
22	30.4	30.6	26	38.2	38.0	May 1	53.9	53.7
27	28.4	28.4	29	38.3	38.0	4	53.4	53.5
31	28.5	28.4	Oct. 3	38.1	38.1	8	52.9	53.2
Feb. 3, 4	28.4	28.5	6	38.1	38.1	12	53.4	53.0
7	28.5	28.5	10	38.3	38.1	15	52.4	52.5
10	28.4	28.6	13	38.0	38.1	18	52.5	52.5
14	30.6	28.6	20	38.0	38.1	22	52.4	52.5
17	28.8	28.7	24	38.2	38.1	25	52.3	52.5
24	28.6	28.8	27	38.2	38.1	29	52.3	52.5
28	28.9	28.8	31	38.1	38.1	June 1	53.0	52.5
Mar. 3	29.0	28.9	Nov. 3	38.2	38.1	5	52.7	52.5
7	33.2	33.2	7	38.1	38.1	8	52.2	52.5
10	33.3	33.2	10	38.0	38.0	12	52.6	52.5
14	33.3	33.2	14	37.7	37.6	15	52.7	52.5
17	33.2	33.2	17	37.2	37.4	19	52.0	52.5
24	33.4	33.2	21	36.9	37.0	22	52.2	52.5
28	33.0	33.2	25	36.8	36.8	27	52.4	52.5
31	33.3	33.2	28	36.3	36.7	29	52.5	52.5
Apr. 4	32.8	33.2	Dec. 1	36.9	36.6	July 3	52.4	52.5
7	33.4	33.2	5	36.8	36.4	6	52.2	52.5
11	33.2	33.2	8	36.0	36.3	10	52.9	52.5
14	33.3	33.2	12	35.4	36.1	13	52.5	52.5
18	33.4	33.2	15	36.0	36.0	25	51.6	51.5
21	33.7	33.2	19	36.4	36.2	28	50.8	50.9
25	33.6	32.8	22	36.2	36.3	Aug. 5	50.0	50.2
28	32.4	32.5	26	36.4	36.4	7	50.3	50.2
May 2	32.0	32.1	29	36.5	36.5	10	49.9	50.2
5	32.4	31.8				14	51.1	51.2
9	31.9	31.6	1914.			17	52.9	52.8
12	30.8	31.4	Jan. 2	36.9	36.6	21	52.8	52.8
16	32.0	32.3	5	36.7	36.7	24	52.9	52.8
19	31.2	31.7	9	37.3	37.4	31	52.8	52.8
23	31.3	31.2	12	39.1	39.2	Sept. 7	52.8	52.7
26	30.4	30.7	16	40.9	40.2	14	52.7	52.6
30	30.9	31.3	19	39.0	40.1	18	52.4	52.6
June 2	30.3	30.7	23	40.4	40.0	21	52.6	52.5
6	29.5	30.0	26	39.4	39.9	22	52.7	52.5
9	30.3	29.7	30	39.4	39.8	28	52.4	52.5
13	28.9	29.3	Feb. 2	38.8	39.7	29	52.3	52.5
16	28.4	29.0	6	50.7	50.4	Oct. 5	52.6	52.3
20	28.6	29.0	9	50.4	50.4	12	52.0	52.1
23	29.5	29.0	13	50.7	50.5	16	51.8	52.0
27	29.0	29.0	16	50.8	50.6	19	51.9	52.0
July 16	37.3	37.7	20	50.6	50.7	23	51.9	51.9
18	37.6	37.7	23	50.6	50.8	26	51.8	51.9
21	37.9	37.7	27	52.8	53.1	Nov. 2	52.0	51.8
25	37.7	37.7	Mar. 2	53.2	53.1	6	52.0	51.8
28	37.8	37.7	6	53.2	53.1	12	52.1	51.8
Aug. 1	38.0	37.9	9	52.8	53.2	16	51.8	51.7
4	37.9	37.9	13	52.8	53.2	21	51.8	51.7
11	37.9	37.9	16	53.2	53.3	23	51.8	51.7
15	37.6	37.9	20	53.3	53.3	24	51.5	51.7
18	38.2	37.9	23	53.3	53.3	30	51.9	51.7
22	37.7	37.9	27	53.1	53.4	Dec. 5	51.3	51.6
25	37.9	37.9	30	53.6	53.4	7	51.4	51.6
29	37.8	37.9	Apr. 6	53.4	53.5	12	52.4	51.6
Sept. 1	38.1	38.0	10	53.7	53.6	15	51.8	51.6
5	37.9	38.0	13	53.6	53.6	19	51.7	51.6
8	38.0	38.0	17	53.9	53.7	21	51.3	51.6
12	38.1	38.0	20	53.6	53.7	25	51.7	51.6
15	38.1	38.0	21	53.4	53.7	29	51.3	51.6
19	37.8	38.0	25	54.2	53.8			

HORIZONTAL INTENSITY.

Absolute observations were made once or twice a week, a day's observations consisting of two sets of deflections at two distances between two sets of oscillations.

After comparison observations with the standard instruments at many of the principal magnetic observatories of the world, the Department of Terrestrial Magnetism of the Carnegie Institution of Washington adopted provisional international standards, representing approximately an average of the various instruments with which comparisons were made. The comparisons at Cheltenham showed that the standard instruments there were in practical agreement with these international standards as regards dip and declination, but that the magnetometer gave results for H about $0.001H$ too high.

It has been decided, beginning with 1913, to reduce the results of horizontal intensity observations made by this Bureau to the above international standard. Intensity results heretofore published must be diminished by $0.001H$ to reduce them to that standard. In the table of annual means on page 27 the intensity results have been so corrected.

In March, 1911, magnetometer No. 36 was compared with No. 31 at the Porto Rico observatory. It was also compared with the Cheltenham standard before and after being sent to Porto Rico. In the spring of 1914 the same procedure was followed with magnetometer No. 17. On the basis of these comparisons, the following corrections to reduce to the international standard were adopted for 1913: January to March, -56γ ; April to June, -57γ ; July to September, -58γ ; October to December, -59γ .

In June and July, 1914, the moment of inertia of the long magnet of magnetometer No. 31 was redetermined, the new value being materially less than the one obtained in 1904. Apparently, in spite of the care exercised, the prevailing moisture in the air caused the magnet to rust, an appreciable amount of rust was removed when the magnet was wiped off, and a gradual decrease of mass and of moment of inertia resulted. On the basis of the deflection observations of previous years, the distribution coefficients P and Q were redetermined in 1914. Beginning with January, 1914, the new values of P , Q , and moment of inertia were used in the computations and the resulting values of H required a correction of -20γ to reduce them to the international standard.

At the beginning of 1913 the H magnet was drifting badly, causing a steady decrease of base-line value. During the year conditions gradually improved, and in 1914 little trouble was experienced from this cause until the last half of December. During the first part of the month the magnet was apparently not entirely free. In attempting to readjust the variometer on December 17 the fiber was broken, and a new one had to be inserted. For the rest of the month the drift was very rapid and the twenty-four hours immediately following the adjustment had to be rejected.

Abrupt changes of H base-line value.

Date	Hour	Amount	Cause
1913.			
Jan. 25	8-9	γ	Cleaned and adjusted.
26	16-17	+ 10	Adjusted.
27	16-17	+ 20	Do.
Feb. 18	8-9	+104	Do.
Mar. 4	9-10	+ 5	Adjusted D.
May 31	10-11	+146	Adjusted.
July 1	9-10	- 16	Do.
23	10-11	+ 6	Do.
1914.			
Apr. 18	16-17	- 38	Do.
29	16-17	- 25	Do.
May 1	8-9	+ 20	Do.
Oct. 2	16-17	- 51	Do.
Dec. 17	16-	.....	New fiber.
27	16-17	+126	Adjusted.

H base-line values at 20° C.

Date	Observed	Adopted	Date	Observed	Adopted	Date	Observed	Adopted
1913.	γ	γ	1913.	γ	γ	1914.	γ	γ
Jan. 22	28396	28396	July 18	28430	28428	Feb. 23	28348	28344
24	390	390	21	440	427	Mar. 2	344	345
27	516	509	25	429	431	9	343	345
31	483	482	28	428	428	16	349	345
Feb. 3	464	464	Aug. 1	421	424	23	344	345
7	442	444	4	420	421	30	345	345
10	432	429	11	413	415	Apr. 7	350	345
14	412	409	15	418	412	13	339	345
17	391	394	18	409	409	21	315	307
24	481	481	22	406	406	27	296	307
28	477	473	25	403	404	Mar. 4	301	302
Mar. 3	464	465	29	406	401	11	309	302
7	463	459	Sept. 1	400	399	18	302	302
10	455	454	5	396	396	19	295	302
14	442	448	8	392	394	25	285	302
17	439	443	12	393	391	June 1	314	302
24	429	433	15	385	388	2	297	302
28	428	427	19	385	386	8	304	302
31	424	423	22	386	383	15	290	302
Apr. 4	411	417	26	379	380	22	300	302
7	415	413	29	376	378	29	310	302
11	404	407	Oct. 3	376	375	10	290	302
14	407	404	6	374	373	13	305	302
18	402	400	10	368	370	25	313	302
21	403	396	13	367	368	28	314	302
25	391	391	20	368	362	Aug. 5	304	302
28	389	387	24	357	359	10	295	302
May 2	381	382	27	360	357	17	294	302
5	378	378	31	355	355	21	298	302
9	379	372	Nov. 3	354	353	21	300	302
12	369	368	7	351	352	24	308	302
16	359	363	10	350	350	31	305	302
19	361	359	17	347	348	Sept. 7	304	306
23	355	354	24	336	346	14	308	309
26	349	350	Dec. 1	343	345	22	317	313
30	345	345	8	346	344	29	324	317
June 2	494	488	12	338	343	Oct. 5	255	261
6	480	482	15	342	343	12	265	257
9	478	478	22	344	342	19	254	255
13	471	473	29	340	342	26	250	252
16	470	469				Nov. 2	255	251
20	465	465	1914.			12	252	254
23	459	463	Jan. 5	341	343	16	265	256
27	463	460	12	337	343	24	264	258
30	458	458	19	347	343	30	256	260
July 4	439	439	26	347	343	Dec. 7	269	265
7	435	436	Feb. 2	348	344	15	272	269
11	432	432	9	348	344	21	159	159
14	423	430	16	334	344	29	213	217

VERTICAL INTENSITY.

Absolute observations of dip were made twice a week. Results with earth inductor No. 1 require a correction of $-1'.0$ to reduce to the standard earth inductor at Cheltenham. As the vertical intensity is computed from the dip and horizontal intensity, the correction applied to H to reduce it to the international standard produces a corresponding change in Z .

Much difficulty was experienced in keeping the Z variometer in good adjustment, and the numerous abrupt changes of base-line value, due to readjustment or other causes, made it very difficult to determine just what base-line values to adopt. In general the practice has been to make the mean of the adopted base-line values for a month agree with the mean of the observed values, and to determine the drift of base-line value from the progressive change shown by the daily means of the hourly ordinates.

In addition to the abrupt changes of base-line value tabulated below there were numerous small changes occurring at the time of changing photographic paper, between 16h and 17h, as follows: February 2, July 4, 7, 9, 10, 14, 15, 19, 21, 22, 23, 30, 31, August 1, 5, 6, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 24, 25, December 5, 6, 10, 11, 16, 18, 20, 1913; May 8, 9, 18, 19, 20, June 9, 10, 15, 16, 17, 27, 28, 29, July 3, 6, 17, 1914. Because of these frequent changes the results for the months in which they occur are less reliable and should be used with caution.

Abrupt changes of Z base-line value.

Date	Hour	Amount	Cause	Date	Hour	Amount	Cause
1913.				1914.			
Jan. 31	16-17	+ 13	Adjusted T.	Feb. 26	10-11	- 90	Adjusted.
Apr. 30	8- 9	+ 8	Deflections.	Mar. 2	16-17	- 3	Adjusted T.
July 1	9-10	+ 37	Do.	Apr. 28	16-18	- 2	Adjusted.
2	8-10	-124	Adjusted.	May 4	16-17	-140	Do.
15	11-12	+ 9	Deflections.	6	8- 9	+ 20	Deflections.
17	13-14	+ 50	Do.	16	8- 9	+ 15	Do.
24	16-	-117	Adjusted.	21	16-17	- 80	Adjusted.
29	-10		Do.	June 8	16-17	+ 90	Do.
Aug. 4	9-10	+ 9	Deflections.	11	13-14	- 25	Deflections.
7	7-	- 29	Adjusted.	14	16-17	- 90	Adjusted.
8	-16		Do.	24	16-17	- 24	Do.
26	9-12	-172	New pivots.	30	9-10	+100	Deflections.
Sept. 4	15-17	+ 96	Adjusted.	30	16-17	-145	Adjusted.
10	8- 9	+ 82	Do.	30	23-	- 18	Deflections.
Oct. 7	9-12	+ 73	Do.	July 1	-17		Adjusted.
20	14-17	+ 65	Do.	2	10-11		Deflections.
Nov. 4	10-12	+ 5	Deflections.	2	14-15	+126	Do.
Dec. 4	9-13	+ 89	Adjusted.	2	16-17	-265	Adjusted.
10	8-10	- 50	Do.	8	8- 9	+ 6	Deflections.
18	12-14	- 95	Do.	9	8- 9	+ 18	Do.
23	8-10	+ 9	Deflections.	13	14-15	+ 5	Do.
1914.				14	16-17	- 64	Adjusted.
Jan. 6	10-13	- 63	Adjusted.	Oct. 2	16-17	- 16	Do.
Feb. 5	10-11	+150	Do.	22	16-17	- 68	Do.
5	15-16	+ 17	Adjusted D.	Nov. 7	16-17	- 80	Do.
7	10-11	+ 27	Deflections.	14	16-17	-168	Do.
9	13-14	+ 9	Do.	15	16-17	+220	Do.
21	9-10	-135	Adjusted.	Dec. 7	10-11	+ 93	Deflections.

Z Base-line values at 20° C.

Date	Observed	Adopted	Date	Observed	Adopted	Date	Observed	Adopted
1913.	γ	γ	1913.	γ	γ	1914.	γ	γ
Jan. 22	34275	34272	Sept. 19	34308	34311	Apr. 6	34358	34377
27	286	272	22	306	308	10	377	375
31	266	272	26	303	304	13	373	373
Feb. 3	287	282	29	303	302	17	379	371
4	298	282	Oct. 3	298	299	20	368	370
7	269	283	6	300	297	25	367	367
10	268	284	8	368	368	27	364	366
14	286	286	10	358	362	May 1	418	413
17	282	287	13	363	359	5	346	357
24	280	289	17	359	354	8	373	375
28	283	290	20	347	348	11	394	399
Mar. 3	300	291	21	390	399	15	413	416
7	294	293	22	398	398	19	439	435
10	292	294	24	386	391	22	375	374
14	290	295	27	376	380	26	377	375
17	279	297	31	374	375	29	359	372
24	263	300	Nov. 3	373	372	June 2	368	369
27	296	302	4	374	371	6	371	369
28	291	302	7	373	373	8	374	369
31	302	304	10	365	371	12	508	502
Apr. 4	309	307	14	364	368	15	392	392
7	314	309	17	369	366	19	415	411
11	322	311	21	364	363	22	415	413
14	311	313	25	367	361	27	454	450
18	316	316	28	359	359	29	478	473
21	327	318	Dec. 1	356	356	July 3	409	404
25	326	321	5	433	442	10	468	465
28	321	323	8	456	458	13	480	470
May 2	336	334	10	462	464	17	414	404
5	337	336	12	434	433	24	385	387
9	324	338	15	446	446	25	392	387
12	333	340	18	470	468	28	389	384
16	346	343	18	374	374	Aug. 5	372	376
19	342	345	22	386	384	7	366	374
23	352	348	26	393	392	14	357	367
26	354	350	29	397	395	17	367	366
30	355	352				21	357	367
June 2	362	353	1914.			24	365	369
6	359	355	Jan. 2	408	404	31	373	372
9	360	357	5	414	407	Sept. 7	379	376
13	363	359	7	337	337	14	383	379
16	362	360	9	304	315	21	388	381
20	362	360	12	307	306	22	388	381
23	357	359	16	303	297	28	392	383
27	356	358	19	284	292	29	388	383
30	362	357	23	321	286	Oct. 5	364	366
July 4	270	275	26	275	283	12	364	363
7	278	282	30	274	279	16	356	361
11	313	321	Feb. 2	275	276	19	352	359
14	325	315	6	451	441	23	296	298
16	350	350	7	472	469	26	300	301
18	390	396	9	490	488	Nov. 2	304	303
21	391	396	13	510	506	6	298	303
23	417	420	16	517	517	12	241	227
30	298	313	20	531	534	16	284	280
Aug. 1	333	326	23	476	470	21	269	280
4	338	335	26	493	499	23	290	280
11	323	318	27	405	410	24	276	280
15	362	355	Mar. 2	417	407	30	282	280
18	371	367	6	395	400	Dec. 5	289	285
22	379	382	9	400	397	7	373	380
25	402	397	13	392	393	12	392	380
29	205	203	16	381	390	15	388	380
Sept. 1	200	199	20	383	387	19	390	380
5	273	274	23	390	385	21	371	380
8	259	262	27	398	382	25	380	380
13	317	318	30	385	380	29	369	380
15	323	315	Apr. 3	372	378			

DIURNAL VARIATION.

The following tables present the diurnal variations of D , H , Z , X , Y , I , and F for each month based on the hourly means for the 10 least disturbed days. The hours are local mean time counted from midnight. The variations in X , Y , I , and F were computed from the variations in D , H , and Z by means of the formulas:*

$$\begin{aligned}\Delta X &= 0.421\Delta D + 0.999\Delta H \\ \Delta Y &= 8.268\Delta D - 0.051\Delta H \\ \Delta I &= 0.049\Delta Z - 0.059\Delta H \\ \Delta F &= 0.771\Delta Z + 0.637\Delta H\end{aligned}$$

A plus sign indicates an hourly value greater than the mean for the day. D and Y , being considered positive when east of north, are negative at Porto Rico. Consequently, in the tables showing the diurnal variation of D and Y , a plus sign indicates an hourly value numerically less but algebraically greater than the mean for the day.

Mean results are also given for groups of four months, as indicated by the Roman numerals at the head of the columns: I-January, February, November, December; II-March, April, September, October; III-May, June, July, August.

At the request of the executive bureau of the International Commission for Terrestrial Magnetism there are given also tables showing the diurnal variation of D , H , X , Y , and Z for the five international quiet days of each month, arranged according to Greenwich mean time. In preparing these tables it was considered a sufficiently close approximation to use the mean of the values for 20h and 21h local mean time as the value for 1h Greenwich mean time of the next day, and so on. The results have been corrected for noncyclical variation when necessary. The record of D , H , and Z for January 1, 1913, is missing, also the record of D for July 4 and 9, 1913, and of Z for July 28, 1913. The record of D , H , and Z is missing for part of September 14, 1913, and the 15th has been used instead in computing the quiet-day means for that month.

* On page 14 of the Results at Vieques for 1911 and 1912, the sign of the last term of the formula for ΔY should be - instead of +.

Diurnal variation of D.

1913.

Hour	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Group means			Year
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
1	-0.3	-0.4	-0.2	0.0	+0.2	+0.1	-0.5	-0.1	-0.1	-0.3	-0.2	-0.2	-0.3	-0.2	-0.1	-0.2
2	-0.3	-0.4	-0.3	+0.1	+0.2	+0.1	-0.3	0.0	-0.1	-0.2	-0.2	-0.2	-0.3	-0.1	0.0	-0.1
3	-0.4	-0.4	-0.3	+0.3	+0.3	+0.3	-0.2	+0.2	-0.1	-0.2	-0.3	-0.3	-0.4	-0.1	+0.1	-0.1
4	-0.3	-0.3	-0.2	+0.5	+0.5	+0.4	0.0	+0.5	+0.2	-0.1	-0.1	-0.2	-0.2	+0.1	+0.4	+0.1
5	-0.2	-0.2	0.0	+0.6	+0.7	+0.6	+0.4	+1.0	+0.6	+0.1	0.0	0.0	-0.1	+0.3	+0.7	+0.3
6	-0.1	-0.1	+0.2	+0.9	+1.6	+1.6	+1.2	+1.9	+1.2	+0.3	+0.2	+0.1	0.0	+0.6	+1.6	+0.7
7	0.0	-0.2	+0.3	+1.9	+2.5	+2.8	+2.6	+3.6	+2.2	+0.8	+0.4	+0.2	+0.1	+1.3	+2.9	+1.4
8	+1.2	+0.6	+1.1	+1.9	+2.2	+2.8	+3.0	+3.5	+2.7	+1.7	+1.2	+0.4	+0.8	+1.8	+2.9	+1.9
9	+2.8	+1.8	+1.7	+1.6	+1.1	+1.5	+2.4	+2.2	+2.3	+2.2	+1.8	+1.2	+1.9	+2.0	+1.8	+1.9
10	+3.1	+2.2	+1.9	+1.3	-0.1	+0.5	+1.5	+0.6	+1.0	+1.7	+1.8	+1.5	+2.2	+1.5	+0.6	+1.4
11	+1.3	+1.7	+1.6	+0.5	-0.6	-0.5	+0.5	-0.3	-0.2	+1.0	+1.0	+1.2	+1.3	+0.7	-0.2	+0.6
12	-0.9	+0.6	+0.8	-0.8	-1.3	-1.3	-0.5	-1.3	-1.1	+0.3	-0.1	+0.4	0.0	-0.2	-1.1	-0.4
13	-2.0	-0.3	-0.3	-2.0	-2.0	-1.7	-1.2	-2.0	-1.7	-0.4	-0.8	-0.7	-1.0	-1.1	-1.7	-1.3
14	-2.1	-1.0	-1.3	-2.3	-2.0	-1.7	-1.8	-2.3	-1.8	-1.0	-1.3	-1.2	-1.4	-1.6	-2.0	-1.7
15	-1.6	-1.2	-1.5	-2.1	-1.7	-1.7	-1.7	-2.2	-1.5	-1.4	-1.5	-1.5	-1.4	-1.6	-1.8	-1.6
16	-0.7	-0.9	-1.3	-1.4	-1.1	-1.4	-1.3	-1.7	-1.2	-1.3	-1.2	-1.1	-1.0	-1.3	-1.4	-1.2
17	-0.2	-0.5	-0.8	-0.5	-0.2	-0.9	-0.9	-0.8	-0.8	-1.0	-0.6	-0.5	-0.4	-0.8	-0.7	-0.6
18	0.0	-0.2	-0.5	-0.2	-0.2	-0.8	-0.6	-0.6	-0.6	-0.5	-0.1	0.0	-0.1	-0.4	-0.6	-0.4
19	0.0	0.0	-0.3	-0.1	-0.1	-0.4	-0.6	-0.5	-0.4	-0.3	0.0	+0.2	0.0	-0.3	-0.4	-0.2
20	+0.2	0.0	-0.2	-0.1	-0.1	-0.2	-0.5	-0.5	-0.2	-0.2	+0.1	+0.2	+0.1	-0.2	-0.3	-0.1
21	+0.3	0.0	-0.1	-0.1	-0.1	-0.1	-0.5	-0.4	-0.2	-0.2	+0.1	+0.3	+0.2	-0.2	-0.3	-0.1
22	+0.2	-0.1	-0.1	-0.1	0.0	0.0	-0.5	-0.3	-0.1	-0.2	+0.1	+0.2	+0.1	-0.1	-0.2	-0.1
23	0.0	-0.2	0.0	0.0	0.0	+0.1	-0.3	-0.2	-0.1	-0.3	-0.1	+0.1	0.0	-0.1	-0.1	-0.1
24	-0.1	-0.3	-0.1	-0.1	+0.1	+0.1	-0.4	-0.1	-0.1	-0.3	-0.2	0.0	-0.2	-0.1	-0.1	-0.1

1914.

1	-0.1	-0.1	0.0	0.0	-0.1	-0.3	-0.2	0.0	0.0	-0.1	-0.4	-0.2	-0.2	0.0	-0.2	-0.1
2	-0.2	-0.1	0.0	+0.2	0.0	-0.2	0.0	-0.1	-0.1	-0.2	-0.6	-0.2	-0.3	0.0	-0.1	-0.1
3	-0.1	-0.1	+0.1	+0.3	+0.2	-0.1	+0.1	0.0	+0.2	-0.1	-0.5	-0.2	-0.2	+0.1	0.0	0.0
4	-0.2	-0.1	+0.2	+0.4	+0.2	+0.1	+0.2	+0.1	+0.5	0.0	-0.4	-0.2	-0.2	+0.3	+0.2	+0.1
5	-0.2	+0.1	+0.2	+0.6	+0.4	+0.4	+0.6	+0.5	+0.8	+0.3	-0.3	-0.1	-0.1	+0.5	+0.5	+0.3
6	-0.1	+0.2	+0.4	+1.0	+1.0	+1.3	+1.5	+1.3	+1.8	+0.2	-0.2	-0.1	0.0	+0.8	+1.3	+0.7
7	-0.3	-0.1	+1.0	+2.0	+2.0	+2.6	+2.5	+2.9	+3.3	+0.6	0.0	-0.1	-0.1	+1.7	+2.5	+1.4
8	+0.1	+0.2	+1.6	+2.0	+2.4	+2.9	+2.6	+3.3	+2.9	+1.4	+1.0	+0.8	+0.5	+2.0	+2.8	+1.8
9	+0.9	+0.5	+1.9	+1.8	+2.0	+2.4	+1.6	+2.4	+1.8	+1.5	+2.2	+2.0	+1.4	+1.8	+2.1	+1.8
10	+1.3	+0.6	+1.5	+1.4	+1.0	+1.3	+0.4	+1.0	+0.5	+1.0	+2.4	+2.5	+1.7	+1.1	+0.9	+1.2
11	+0.6	+0.2	+1.2	+0.7	+0.2	+0.2	-0.5	0.0	-0.8	+0.4	+1.7	+2.0	+1.1	+0.4	0.0	+0.5
12	-0.1	0.0	+0.2	-0.5	-0.4	-0.7	-1.2	-0.8	-1.7	0.0	+0.5	+0.2	+0.2	-0.5	-0.8	-0.4
13	-0.5	-0.3	-0.9	-1.6	-1.0	-1.2	-1.4	-1.7	-2.0	-0.1	-0.7	-1.3	-0.7	-1.2	-1.3	-1.1
14	-0.7	-0.4	-1.9	-2.0	-1.4	-1.4	-1.2	-2.4	-1.8	-0.4	-1.5	-1.8	-1.1	-1.5	-1.6	-1.4
15	-0.6	-0.6	-1.9	-2.1	-1.5	-1.6	-1.2	-2.5	-1.4	-0.9	-1.6	-1.9	-1.2	-1.6	-1.7	-1.5
16	-0.4	-0.4	-1.3	-1.5	-1.2	-1.3	-1.0	-2.0	-1.1	-1.4	-1.2	-1.5	-0.9	-1.3	-1.4	-1.2
17	-0.1	-0.2	-0.8	-0.8	-0.9	-0.9	-0.4	-0.8	-0.7	-1.1	-1.8	-0.6	-0.7	-0.8	-0.8	-0.8
18	0.0	-0.2	-0.6	-0.6	-0.7	-0.7	-0.4	-0.5	-0.6	-0.6	-0.1	-0.1	-0.1	-0.6	-0.6	-0.4
19	+0.1	+0.1	-0.3	-0.4	-0.6	-0.7	-0.5	-0.3	-0.6	-0.3	+0.1	+0.1	+0.1	-0.4	-0.5	-0.3
20	+0.1	+0.3	-0.2	-0.2	-0.5	-0.6	-0.6	-0.3	-0.3	0.0	+0.2	+0.2	+0.2	-0.2	-0.5	-0.2
21	+0.2	+0.4	-0.2	-0.2	-0.4	-0.5	-0.5	-0.1	-0.3	+0.1	+0.2	+0.3	+0.3	-0.2	-0.4	-0.1
22	+0.1	+0.3	-0.1	-0.2	-0.3	-0.4	-0.3	0.0	-0.2	0.0	+0.1	+0.2	+0.2	-0.1	-0.2	-0.1
23	0.0	0.0	-0.1	-0.2	-0.2	-0.3	-0.1	+0.1	-0.1	0.0	0.0	+0.1	0.0	-0.1	-0.1	-0.1
24	0.0	-0.1	0.0	0.0	-0.2	-0.3	-0.2	+0.1	-0.1	0.0	-0.1	-0.1	-0.1	0.0	-0.2	-0.1

Diurnal variation of H.

1913.

Hour	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Group means			Year
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
1	-1	-4	-7	-4	-4	-3	-2	-2	-3	-4	-4	-4	-3	-4	-3	-3
2	0	-3	-6	-3	-4	-3	-2	-2	-4	-3	-3	-3	-2	-4	-3	-3
3	+1	-1	-5	-2	-3	-3	-2	-3	-2	-2	-1	-2	-1	-3	-3	-2
4	+3	+2	-3	-1	-2	-2	-2	-2	-2	-2	0	0	+2	-2	-1	0
5	+3	+2	-1	0	-2	-3	-2	-3	-1	0	+2	+1	+2	0	-2	0
6	+4	+2	0	-1	-1	-3	-1	-2	-1	+1	+2	+3	+3	0	-2	0
7	+6	+8	+4	-1	+1	-4	-1	-2	+1	+2	+6	+7	+6	+2	-2	+2
8	+5	+8	+9	+1	+6	-1	0	0	+4	+3	+7	+9	+7	+4	+1	+4
9	+1	+7	+11	+5	+16	+8	+4	+8	+6	+4	+7	+8	+6	+6	+9	+7
10	-2	+8	+12	+8	+20	+14	+7	+12	+8	+5	+7	+7	+5	+8	+13	+9
11	-3	+7	+11	+10	+18	+16	+7	+13	+10	+9	+5	+6	+4	+10	+14	+9
12	-4	+5	+9	+6	+14	+14	+6	+9	+8	+9	+1	+2	+1	+8	+11	+7
13	-6	+1	+7	+4	+5	+9	+3	+4	+5	+4	-3	-4	-3	+5	+5	+2
14	-5	0	+2	+3	-2	+6	+2	-2	-1	-4	-4	-6	-4	+2	+1	0
15	-3	-	+2	+1	-10	-7	-1	-6	-4	-4	-2	-6	-4	+1	+4	-3
16	-1	-3	-2	-3	-13	-8	-2	-7	-5	-3	-2	-5	-3	-4	-7	-5
17	+1	-6	-5	-6	-9	-7	-4	-7	-4	-3	-2	-2	-2	-4	-4	-3
18	+2	-	-5	-4	-5	-7	-4	-2	-3	-2	-1	-2	-2	-4	-4	-3
19	+1	-5	-5	-4	-4	-4	-2	-1	-2	-2	0	-1	-1	-3	-3	-2
20	+1	-6	-6	-3	-4	-4	-1	-2	-2	-2	-2	-1	-2	-3	-3	-2
21	-2	-4	-6	-2	-4	-4	-1	-2	-2	-3	-2	-2	-2	-3	-3	-3
22	-2	-6	-6	-2	-4	-4	-1	-2	-2	-2	-3	-3	-3	-3	-3	-3
23	-1	-3	-6	-1	-4	-3	-1	-1	-2	-2	-3	-3	-2	-3	-2	-2
24	0	-2	-6	-2	-2	-2	-1	-1	-2	-2	-2	-2	-2	-3	-2	-2

1914.

1	-3	-7	-6	-4	-4	-2	-4	-1	-3	-3	-2	-1	-3	-4	-3	-3
2	-3	-6	-5	-2	-4	-3	-4	-1	-1	-2	-1	-1	-3	-2	-3	-3
3	-2	-4	-4	-2	-3	-2	-5	0	-2	-2	0	0	-2	-2	-2	-2
4	-1	-3	-2	-2	-1	-2	-5	-2	+2	0	+1	+2	-1	-2	-2	-1
5	-	-	-	-	0	0	-4	-1	+2	0	+1	+3	0	-1	-1	0
6	0	-3	-2	-3	0	0	-	-2	0	+2	+3	+6	+4	0	-2	+2
7	+4	+2	+2	-4	+2	0	-5	-1	+4	+3	+3	+6	+6	+2	-1	+5
8	+7	+8	+12	+3	+6	+2	+1	+2	+6	+6	+4	+3	+7	+4	+3	+7
9	+8	+11	+10	+8	+7	+6	+9	+8	+2	+6	+3	+1	+5	+8	+8	+7
10	+7	+11	+13	+9	+9	+8	+15	+12	+9	+6	+3	-5	+4	+9	+11	+8
11	+3	+10	+15	+7	+7	+8	+17	+12	+9	+6	+1	-6	+2	+9	+11	+7
12																
13	0	+8	+13	+5	+4	+6	+14	+9	+4	+4	0	-6	0	+6	+8	+5
14	-1	+5	+7	+4	-1	+4	+9	+4	-2	+2	-2	-4	0	+3	+4	+2
15	-2	+2	0	+2	-3	0	+3	+1	-5	-4	-2	-2	-1	+2	0	+1
16	-4	-2	-5	-2	-4	-3	-2	-6	-5	-5	-3	0	-2	-4	-4	-3
17	-3	-4	-9	-5	-4	-5	-6	-8	-4	-4	-2	0	-2	-6	-6	-4
18	-2	-4	-6	-4	-2	-4	-6	-6	-2	-2	0	+1	-1	-4	-4	-3
19	-2	-5	-5	-3	-2	-3	-3	-3	-2	-3	0	+2	-1	-3	-3	-2
20	-3	-4	-4	-2	-1	-2	-2	-3	-1	-2	+1	+1	-2	-2	-2	-2
21	-3	-6	-5	-2	0	-2	-2	-4	-2	-2	-1	0	-2	-3	-2	-2
22	-2	-5	-5	-1	-1	-2	-4	-3	-1	-2	-2	0	-2	-2	-2	-2
23	-2	-5	-4	0	-1	-1	-4	-2	-1	-3	-2	0	-2	-2	-2	-2
24	-1	-5	-3	0	-2	-1	-3	-2	-2	-2	-1	+1	-2	-2	-2	-2

Diurnal variation of Z.

1913.

Hour	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Group means			Year
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
1	+1	+2	+1	+0	-1	-2	-4	-3	+0	+0	+2	+1	+2	+0	-2	+0
2	+1	+2	+1	+0	-1	-2	-3	-3	+0	+0	+3	+2	+2	+0	-2	+0
3	+1	+3	+1	+1	-1	-2	-3	-3	+2	+1	+3	+3	+2	+1	-2	+0
4	+2	+3	+2	+1	-1	-1	-2	-1	+2	+2	+3	+3	+3	+2	-1	+1
5	+2	+3	+2	+2	-1	0	+1	+1	+3	+3	+2	+3	+2	+3	0	+2
6	+3	+4	+2	+2	-2	-1	+1	+2	+2	+4	+2	+3	+3	+2	+0	+2
7	+4	+4	+2	-1	-3	-3	-1	-3	-3	+2	+1	+4	+3	0	-2	0
8	+1	+3	+1	-3	-4	-3	-2	-4	-5	-1	-2	0	0	-2	-3	-2
9	-5	0	-1	-3	-1	0	-1	-1	-7	-3	-5	-3	-3	-4	-1	-2
10	-9	-3	-2	-4	+1	+4	0	0	-6	-4	-6	-6	-6	-4	+1	-3
11	-7	-5	-4	-4	+2	+5	+3	0	-6	-4	-5	-7	-6	-4	+2	-3
12	-4	-7	-5	-4	+4	+3	+5	0	-4	-5	-2	-8	-5	-4	+3	-2
13	-2	-7	-4	-1	+4	0	+5	0	-2	-6	-1	-6	-4	-3	+2	-2
14	-1	-6	-2	+1	+5	0	+4	+1	-2	-4	-1	-3	-3	-2	+2	-1
15	0	-3	-2	+2	+4	+1	+4	+4	-1	-2	0	+1	0	-1	+3	+1
16	0	-1	-1	+1	+2	+2	+3	+3	+2	-1	+1	+3	+1	0	+2	+1
17	+1	0	0	+1	0	+1	+1	+2	+3	+1	+1	+4	+1	+1	+1	+1
18	+2	+2	+1	+2	0	0	+1	+3	+4	+2	0	+2	+2	+2	+1	+2
19	+2	+2	+2	+3	-1	0	+1	+3	+5	+3	+1	+1	+2	+3	+1	+2
20	+2	+2	+2	+3	-1	0	-1	+2	+3	+2	0	+1	+1	+3	0	+1
21	+1	+2	+1	+3	-2	0	-2	0	+3	+2	0	0	+1	+2	-1	+1
22	+1	+1	+1	+2	-1	-1	-3	-1	+2	+2	+1	0	+1	+2	-2	0
23	+1	0	+1	0	-1	-1	-3	-2	+1	+1	+1	0	0	+1	-2	0
24	+1	+1	0	-2	-2	-1	-4	-2	+1	+1	+3	+1	+1	0	-2	0

1914.

1	+2	+3	+4	+2	0	0	+1	+1	+2	+5	+3	+5	+3	+3	0	+2
2	+2	+3	+4	+2	0	-1	0	+2	+3	+5	+3	+5	+3	+4	0	+2
3	+3	+4	+5	+2	0	0	-1	+1	+3	+4	+3	+5	+4	+4	0	+2
4	+4	+4	+4	+2	+1	0	-1	0	+4	+4	+2	+5	+4	+4	0	+2
5	+3	+4	+3	+1	+1	0	0	-1	+4	+2	+2	+4	+3	+2	0	+2
6	+2	+3	+1	-1	+1	0	-2	0	+3	+2	+3	+4	+3	+1	0	+1
7	+2	+3	-2	-4	0	-4	-6	-5	-5	-2	+2	+4	+3	-3	-4	-1
8	0	0	-8	-6	-4	-5	-8	-8	-5	-5	-1	0	0	-6	-6	-4
9	-5	-3	-11	-6	-5	-5	-4	-6	-5	-9	-4	-6	-4	-8	-5	-6
10	-9	-6	-13	-7	-5	-4	-1	-4	-4	-9	-7	-10	-8	-8	-4	-7
11	-9	-7	-13	-8	-4	-2	0	-1	-4	-6	-6	-14	-9	-8	-2	-6
12	-8	-8	-11	-8	-2	0	0	0	-4	-5	-7	-11	-8	-7	0	-5
13	-6	-8	-9	-5	0	+1	+1	+1	-3	-4	-6	-8	-7	-5	+1	-4
14	-3	-8	-4	-2	+2	+5	+3	+3	-2	-3	-4	-2	-4	-3	+3	-1
15	0	-6	-1	0	+3	+4	+4	+3	-1	-2	-1	0	-2	-1	+4	0
16	+2	-3	+1	+1	+3	+3	+4	+1	0	+1	0	+2	+1	+1	+3	+1
17	+2	-2	+4	+2	+2	+2	+2	+1	+2	+2	+2	+3	+1	+2	+2	+2
18	+4	+2	+6	+3	+2	+2	+2	0	+3	+2	+2	+3	+3	+4	+2	+3
19	+4	+5	+8	+4	+2	+2	+2	+1	+2	+2	+2	+3	+4	+4	+2	+3
20	+3	+6	+8	+6	+2	+2	+2	+2	+2	+3	+2	+2	+3	+5	+2	+3
21	+2	+4	+7	+6	+2	+1	+1	+1	+2	+3	+3	+2	+3	+4	+1	+3
22	+2	+4	+6	+6	+1	0	0	+2	+2	+3	+3	+1	+2	+4	+1	+2
23	+2	+3	+6	+6	0	0	0	+3	0	+4	+3	+2	+2	+4	+1	+2
24	+2	+2	+4	+4	0	0	+2	+3	+1	+4	+4	+3	+3	+3	+1	+2

Diurnal variation of X.

1913.

Hour	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Group means			Year
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
1	-1	-4	-7	-4	-4	-3	-2	-2	-3	-4	-4	-4	-3	-4	-3	-3
2	0	-3	-6	-3	-6	-3	-2	-2	-4	-3	-3	-3	-2	-4	-3	-3
3	+1	-1	-5	-2	-3	-3	-2	-3	-4	-2	-1	-2	-1	-3	-3	-2
4	+3	+1	-3	-1	-3	-2	-2	-2	-2	-2	0	0	+1	-2	-2	-1
5	+3	+2	-1	0	-2	-3	-2	-3	-1	0	+2	+1	+2	0	-2	0
6	+4	+2	0	-1	0	-2	0	-1	0	+1	+2	+3	+3	0	-1	+1
7	+6	+5	+4	0	+2	-3	0	0	+2	+2	+6	+7	+6	+2	0	+3
8	+6	+8	+9	+2	+7	0	+1	+1	+5	+4	+8	+9	+8	+5	+2	+5
9	+2	+9	+12	+6	+16	+9	+5	+9	+7	+5	+8	+9	+7	+7	+10	+8
10	-1	+8	+13	+9	+20	+14	+8	+12	+8	+6	+8	+8	+6	+9	+13	+9
11	-2	+8	+12	+10	+18	+16	+7	+13	+10	+9	+5	+7	+5	+10	+14	+9
12	-4	+5	+9	+6	+13	+13	+6	+8	+8	+9	+1	+2	+1	+8	+10	+6
13	-7	+1	+7	+3	+4	+8	+2	+3	+4	+4	-3	-4	-3	+4	+4	+2
14	-6	0	+4	+2	-3	+5	+1	-3	-2	-1	-5	-7	-5	+1	0	+1
15	-4	-2	+1	0	-11	-2	-2	-7	-5	-5	-5	-7	-5	-2	-5	-4
16	-1	-3	-3	-4	-13	-8	-3	-8	-6	-5	-3	-5	-3	-5	-8	-5
17	+1	-6	-5	-6	-9	-8	-4	-7	-4	-3	-2	-2	-2	-4	-7	-5
18	+2	-6	-5	-4	-5	-7	-4	-2	-3	-2	-1	-2	-2	-4	-4	-3
19	+1	-5	-5	-4	-4	-4	-2	-1	-2	-2	0	-1	-1	-3	-3	-2
20	+1	-5	-6	-3	-4	-4	-1	-1	-2	-2	-2	-1	-2	-3	-2	-2
21	0	-4	-6	-2	-4	-4	-1	-2	-2	-3	-2	-2	-2	-3	-3	-3
22	-2	-4	-6	-2	-4	-4	-1	-2	-2	-2	-2	-3	-3	-3	-3	-3
23	-1	-3	-6	-1	-4	-3	-1	-1	-2	-2	-3	-3	-2	-3	-2	-2
24	0	-2	-6	-2	-2	-2	-1	-1	-2	-2	-2	-2	-2	-3	-2	-2

1914.

1	-3	-7	-6	-4	-4	-2	-4	-1	-3	-3	-2	-1	-3	-4	-3	-3
2	-3	-6	-5	-2	-4	-3	-4	0	-1	-2	-2	+1	-3	-2	-3	-3
3	-2	-6	-4	-2	-3	-2	-5	-1	-1	-2	-1	+1	-2	-2	-3	-2
4	-2	-4	-2	-2	-2	-2	-2	0	0	0	0	+2	-1	-1	-2	-1
5	-1	-3	-1	-2	-1	-2	-5	-2	+2	0	+1	+2	0	0	-2	-1
6	0	-3	-2	-3	0	+1	-5	0	+3	0	+1	+3	0	0	-1	0
7	+4	+2	0	-3	+1	+1	-3	-1	+1	+2	+3	+5	+4	0	-1	+1
8	+7	+8	+3	+1	+3	+1	-4	0	+1	+5	+4	+6	+6	+3	0	+3
9	+8	+12	+8	+4	+7	+3	+2	+3	+3	+7	+5	+4	+7	+5	+4	+5
10	+9	+11	+11	+9	+7	+7	+9	+8	+6	+6	+4	0	+6	+8	+8	+7
11	+7	+11	+13	+9	+9	+8	+15	+12	+9	+6	+4	-4	+4	+9	+11	+8
12	+3	+10	+15	+7	+7	+8	+16	+12	+8	+6	+1	-6	+2	+9	+11	+7
13	0	+8	+13	+4	+4	+5	+13	+8	+3	+4	0	-7	0	+6	+8	+5
14	-1	+5	+6	+3	-2	+3	+8	+3	-3	+2	-3	-5	-1	+2	+3	+1
15	-2	+2	-1	+1	-4	-1	+2	-2	-6	-4	-3	-3	-2	-3	-1	-2
16	-4	-2	-6	-3	-5	-4	-2	-7	-5	-6	-4	-1	-3	-5	-5	-4
17	-3	-4	-9	-5	-4	-5	-6	-8	-4	-4	-3	0	-2	-6	-6	-5
18	-2	-4	-6	-4	-2	-4	-6	-6	-2	-2	0	+1	-1	-4	-4	-3
19	-2	-5	-5	-3	-2	-3	-3	-3	-2	-3	0	+2	-1	-3	-3	-2
20	-3	-4	-4	-2	-1	-2	-2	-3	-1	-2	0	+1	-2	-2	-2	-2
21	-3	-6	-5	-2	0	-2	-2	-4	-2	-2	-1	+1	-2	-3	-2	-2
22	-2	-5	-5	-1	-1	-2	-4	-3	-1	-2	-2	0	-2	-2	-2	-2
23	-2	-5	-4	0	-1	-1	-4	-2	-1	-3	-2	0	-2	-2	-2	-2
24	-1	-5	-3	0	-2	-1	-3	-2	-2	-2	-1	+1	-2	-2	-2	-2

Diurnal variation of Y.

1913.

Hour	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Group means			Year
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
1	-2	-3	-1	0	+2	+1	-4	-1	-1	-2	-1	-1	-2	-1	-1	-1
2	-2	-3	-2	+1	+2	+1	-2	0	-1	-2	-2	-2	-2	-1	0	-1
3	-3	-3	-2	+3	+3	+3	-2	+2	-1	-2	-2	-2	-3	-1	+1	-1
4	-3	-3	-2	+4	+4	+3	0	+4	+2	-1	-1	-2	-2	+1	+3	0
5	-2	-2	0	+5	+6	+5	+3	+8	+5	+1	0	0	-1	+3	+6	+2
6	-1	-1	+2	+7	+13	+13	+10	+16	+10	+2	+2	+1	0	+5	+13	+6
7	0	-2	+2	+16	+21	+23	+22	+30	+18	+7	+3	+1	+1	+11	+24	+12
8	+10	+5	+9	+16	+18	+23	+25	+29	+22	+14	+10	+3	+7	+15	+24	+15
9	+23	+14	+14	+13	+8	+12	+20	+18	+19	+18	+15	+10	+15	+16	+14	+15
10	+26	+18	+15	+10	-2	+3	+12	+4	+8	+14	+15	+12	+18	+12	+4	+11
11	+11	+14	+13	+4	-6	-5	+4	-3	-2	+8	+8	+10	+11	+6	-2	+5
12	-7	+5	+6	-7	-11	-11	-4	-11	-9	+2	-1	+3	0	-2	-9	-4
13	-16	-3	-3	-17	-17	-15	-10	-17	-14	-4	-6	-6	-8	-9	-15	-11
14	-17	-8	-11	-19	-16	-14	-15	-19	-15	-8	-11	-10	-11	-13	-16	-14
15	-13	-10	-13	-17	-14	-14	-14	-18	-12	-11	-12	-12	-12	-13	-15	-13
16	-6	-7	-11	-11	-8	-11	-11	-14	-10	-11	-10	-9	-8	-11	-11	-10
17	-2	-4	-6	-4	-1	-7	-7	-6	-6	-8	-5	-4	-4	-6	-5	-5
18	0	-1	-4	-1	-1	-6	-5	-5	-5	-4	-1	0	-1	-3	-4	-3
19	0	0	-2	-1	-1	-3	-5	-4	-3	-2	0	+2	0	-2	-3	-2
20	+2	0	-1	-1	-1	-1	-4	-4	-2	-2	+1	+2	+1	-2	-2	-1
21	+2	0	-1	-1	-1	-1	-4	-3	-2	-2	+1	+3	+2	-2	-2	-1
22	+2	-1	-1	-1	0	0	-4	-2	-1	-2	+1	+2	+1	-1	-2	-1
23	0	-2	0	0	0	+1	-2	-2	-1	-2	-1	+1	0	-1	-1	-1
24	-1	-2	-1	-1	+1	+1	-3	-1	-1	-2	-2	0	-1	-1	-1	-1

1914.

1	-1	0	0	0	-1	-2	-1	0	0	-1	-3	-2	-2	0	-1	-1
2	-2	-1	0	+2	0	-2	0	-1	+2	-2	-5	-2	-2	0	-1	-1
3	-1	-1	+1	+3	+2	-1	+1	0	-1	-1	-4	-2	-2	+1	0	0
4	-2	-1	+2	+3	+2	+1	+2	+1	+4	0	-3	-2	-2	+2	+2	+1
5	-2	+1	+2	+5	+3	+3	+5	+4	+7	+2	-3	-1	-1	+4	+4	+2
6	-1	+2	+3	+8	+8	+11	+13	+11	+15	+2	-2	-1	0	+7	+11	+6
7	-3	-1	+8	+17	+17	+22	+21	+24	+27	+5	0	-1	-1	+14	+21	+11
8	0	+1	+13	+17	+20	+24	+22	+27	+24	+11	+8	+6	+4	+16	+23	+14
9	+7	+4	+15	+15	+16	+20	+13	+20	+15	+12	+18	+16	+11	+14	+17	+14
10	+10	+4	+12	+11	+8	+10	+3	+8	+4	+8	+20	+21	+14	+9	+7	+10
11	+5	+1	+9	+5	+1	+1	-5	-1	-7	+3	+14	+17	+9	+3	-1	+4
12	-1	-1	+1	-4	-4	-6	-11	-7	-15	0	+4	+2	+1	-5	-7	-4
13	-4	-3	-8	-13	-8	-10	-12	-15	-17	-1	-6	-10	-6	-10	-11	-9
14	-6	-4	-16	-17	-12	-12	-10	-20	-15	-3	-12	-15	-9	-13	-13	-12
15	-5	-5	-16	-17	-12	-13	-10	-21	-11	-7	-13	-16	-10	-13	-14	-12
16	-3	-3	-10	-12	-10	-11	-8	-16	-9	-11	-10	-12	-7	-11	-11	-10
17	-1	-1	-6	-6	-7	-7	-3	-6	-6	-9	-15	-5	-6	-7	-6	-6
18	0	-1	-5	-5	-6	-6	-3	-4	-5	-5	-1	-1	-1	-5	-5	-3
19	+1	+1	-2	-3	-5	-6	-4	-2	-5	-2	+1	+1	+1	-3	-4	-2
20	+1	+3	-1	-2	-4	-5	-5	-2	-2	0	+2	+2	+2	-1	-4	-1
21	+2	+4	-1	-2	-3	-4	-4	-1	-2	+1	+2	+2	+3	-1	-3	0
22	+1	+3	-1	-2	-2	-3	-2	0	-2	0	+1	+2	+2	-1	-2	0
23	0	0	-1	-2	-2	-2	-1	+1	-1	0	0	+1	0	-1	-1	-1
24	0	-1	0	0	-2	-2	-2	+1	-1	0	-1	-1	-1	0	-1	-1

Diurnal variation of I.

1913.

Hour	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Group means			Year
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
1	+	+	+	+	+	+	-	0	+	+	+	+	+	+	+	+
2	0.0	+0.3	+0.4	+0.2	+0.2	+0.1	0.0	0.0	+0.2	+0.2	+0.3	+0.3	+0.3	+0.2	+0.1	+0.2
3	0.0	+0.2	+0.3	+0.2	+0.1	+0.1	0.0	0.0	+0.3	+0.2	+0.2	+0.3	+0.2	+0.2	+0.1	+0.2
4	-0.1	+0.1	+0.3	+0.1	+0.1	+0.1	0.0	+0.1	+0.2	+0.2	+0.1	+0.1	+0.1	+0.2	+0.1	+0.1
5	-0.1	0.0	+0.2	+0.1	+0.1	+0.2	+0.2	+0.2	+0.2	+0.1	0.0	+0.1	0.0	+0.1	+0.2	+0.1
6	-0.1	+0.1	+0.1	+0.2	0.0	+0.1	+0.1	+0.2	+0.2	+0.1	0.0	0.0	0.0	+0.1	+0.1	+0.1
7	-0.2	-0.1	-0.1	0.0	-0.2	+0.1	0.0	0.0	-0.2	0.0	-0.3	-0.2	-0.2	-0.1	0.0	-0.1
8	-0.2	-0.3	-0.5	-0.2	-0.6	-0.1	-0.1	-0.2	-0.5	-0.2	-0.5	-0.5	-0.4	-0.3	-0.2	-0.3
9	-0.3	-0.3	-0.7	-0.4	-1.0	-0.5	-0.3	-0.5	-0.7	-0.4	-0.7	-0.6	-0.6	-0.6	-0.6	-0.5
10	-0.3	-0.6	-0.8	-0.7	-1.1	-0.6	-0.4	-0.7	-0.8	-0.5	-0.7	-0.7	-0.6	-0.7	-0.7	-0.7
11	-0.2	-0.7	-0.8	-0.8	-1.0	-0.7	-0.3	-0.8	-0.9	-0.7	-0.5	-0.7	-0.5	-0.8	-0.7	-0.7
12	0.0	-0.6	-0.8	-0.6	-0.6	-0.7	-0.1	-0.5	-0.7	-0.8	-0.2	-0.5	-0.3	-0.7	-0.5	-0.5
13	+0.2	-0.4	-0.6	-0.3	-0.1	-0.5	+0.1	-0.2	-0.4	-0.5	+0.1	-0.1	0.0	-0.4	-0.2	-0.2
14	+0.2	-0.3	-0.4	-0.1	+0.4	-0.4	+0.1	+0.2	0.0	-0.1	+0.2	+0.2	+0.1	-0.2	+0.1	0.0
15	+0.2	-0.1	-0.2	0.0	+0.8	+0.1	+0.3	+0.6	+0.2	+0.1	+0.2	+0.4	+0.2	0.0	+0.4	+0.2
16	+0.1	+0.1	+0.1	+0.2	+0.9	+0.5	+0.3	+0.6	+0.4	+0.2	+0.2	+0.4	+0.2	+0.2	+0.6	+0.3
17	0.0	+0.4	+0.3	+0.4	+0.5	+0.5	+0.3	+0.5	+0.4	+0.2	+0.2	+0.3	+0.2	+0.3	+0.5	+0.3
18	0.0	+0.5	+0.3	+0.3	+0.3	+0.4	+0.3	+0.3	+0.4	+0.2	+0.1	+0.2	+0.2	+0.3	+0.3	+0.3
19	0.0	+0.4	+0.4	+0.4	+0.2	+0.2	+0.2	+0.2	+0.4	+0.3	0.0	+0.1	+0.1	+0.4	+0.2	+0.2
20	0.0	+0.4	+0.5	+0.3	+0.2	+0.2	0.0	+0.2	+0.3	+0.2	+0.1	+0.1	+0.2	+0.3	+0.1	+0.2
21	0.0	+0.3	+0.4	+0.3	+0.1	+0.2	0.0	+0.1	+0.3	+0.3	+0.1	+0.1	+0.1	+0.3	+0.1	+0.2
22	+0.2	+0.3	+0.4	+0.2	+0.2	+0.2	-0.1	+0.1	+0.2	+0.2	+0.2	+0.2	+0.2	+0.3	+0.1	+0.2
23	+0.1	+0.2	+0.4	+0.1	+0.2	+0.1	-0.1	0.0	+0.2	+0.2	+0.2	+0.2	+0.2	+0.2	0.0	+0.1
24	0.0	+0.2	+0.4	0.0	0.0	+0.1	-0.1	0.0	+0.2	+0.2	+0.3	+0.2	+0.2	+0.2	0.0	+0.1

1914.

1	+0.3	+0.6	+0.6	+0.3	+0.2	+0.1	+0.3	+0.1	+0.3	+0.4	+0.3	+0.3	+0.4	+0.4	+0.2	+0.3
2	+0.3	+0.5	+0.5	+0.2	+0.2	+0.1	+0.2	+0.1	+0.2	+0.4	+0.3	+0.2	+0.3	+0.3	+0.2	+0.3
3	+0.3	+0.6	+0.5	+0.2	+0.2	+0.1	+0.2	+0.1	+0.2	+0.3	+0.2	+0.2	+0.3	+0.3	+0.2	+0.3
4	+0.3	+0.4	+0.3	+0.2	+0.2	+0.1	+0.2	0.0	+0.2	+0.2	+0.1	+0.1	+0.2	+0.2	+0.1	+0.2
5	+0.2	+0.4	+0.2	+0.2	+0.1	+0.1	+0.3	+0.1	+0.1	+0.1	0.0	+0.1	+0.2	+0.2	+0.1	+0.2
6	+0.1	+0.3	+0.2	+0.1	0.0	0.0	+0.1	+0.1	0.0	+0.1	+0.1	0.0	+0.1	+0.1	+0.1	+0.1
7	-0.1	0.0	-0.1	0.0	0.0	-0.2	-0.1	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
8	-0.4	-0.5	-0.5	-0.3	-0.3	-0.2	-0.1	-0.3	-0.2	-0.5	-0.3	-0.4	-0.4	-0.4	-0.2	-0.3
9	-0.7	-0.9	-1.0	-0.5	-0.6	-0.4	-0.3	-0.4	-0.4	-0.8	-0.4	-0.5	-0.6	-0.7	-0.4	-0.6
10	-0.9	-0.9	-1.2	-0.8	-0.7	-0.6	-0.6	-0.6	-0.7	-0.6	-0.5	-0.4	-0.7	-0.9	-0.6	-0.7
11	-0.9	-1.0	-1.4	-0.9	-0.7	-0.6	-0.9	-0.8	-0.7	-0.6	-0.5	-0.4	-0.7	-0.9	-0.8	-0.8
12	-0.6	-1.0	-1.4	-0.8	-0.5	-0.5	-1.0	-0.7	-0.7	-0.6	-0.4	-0.2	-0.5	-0.9	-0.7	-0.7
13	-0.3	-0.9	-1.2	-0.5	-0.2	-0.3	-0.8	-0.5	-0.4	-0.4	-0.3	0.0	-0.4	-0.6	-0.4	-0.5
14	-0.1	-0.7	-0.6	-0.3	+0.2	0.0	-0.4	-0.1	0.0	-0.3	-0.1	+0.1	-0.2	-0.3	-0.1	-0.2
15	+0.1	-0.4	0.0	-0.1	+0.3	+0.2	0.0	+0.2	+0.2	+0.1	+0.1	+0.1	0.0	+0.1	+0.2	+0.1
16	+0.3	0.0	+0.3	+0.2	+0.4	+0.3	+0.3	+0.4	+0.3	+0.3	+0.2	+0.1	+0.1	+0.3	+0.4	+0.3
17	+0.3	+0.1	+0.7	+0.4	+0.3	+0.4	+0.5	+0.5	+0.3	+0.3	+0.2	+0.1	+0.2	+0.4	+0.4	+0.3
18	+0.3	+0.3	+0.6	+0.4	+0.2	+0.3	+0.5	+0.4	+0.3	+0.2	+0.1	+0.1	+0.2	+0.4	+0.3	+0.3
19	+0.3	+0.5	+0.7	+0.4	+0.2	+0.3	+0.3	+0.2	+0.2	+0.3	+0.1	0.0	+0.2	+0.4	+0.2	+0.3
20	+0.3	+0.5	+0.6	+0.4	+0.2	+0.2	+0.2	+0.3	+0.2	+0.3	+0.1	0.0	+0.3	+0.4	+0.2	+0.3
21	+0.3	+0.6	+0.6	+0.4	+0.1	+0.2	+0.2	+0.3	+0.2	+0.3	+0.2	0.0	+0.3	+0.4	+0.2	+0.3
22	+0.2	+0.5	+0.6	+0.4	+0.1	+0.1	+0.2	+0.3	+0.2	+0.3	+0.3	0.0	+0.2	+0.4	+0.2	+0.3
23	+0.2	+0.4	+0.5	+0.3	+0.1	+0.1	+0.2	+0.3	+0.1	+0.4	+0.3	+0.1	+0.2	+0.3	+0.2	+0.2
24	+0.2	+0.4	+0.4	+0.2	+0.1	+0.1	+0.3	+0.3	+0.2	+0.3	+0.3	+0.1	+0.2	+0.3	+0.2	+0.2

DIURNAL VARIATION.

21

Diurnal variation of F.

1913.

Hour	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Group means			Year
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
1	0	-1	-4	-3	-3	-3	-4	-4	-2	-3	-1	-2	-1	-3	-3	-2
2	+1	0	-3	-2	-3	-3	-4	-4	-3	-2	0	0	0	-3	-3	-2
3	+1	+2	-2	-1	-3	-3	-4	-4	-1	+1	+2	+1	+1	-1	-3	-1
4	+3	+3	0	0	-2	-2	-3	-2	0	0	+2	+2	+3	0	-2	0
5	+3	+4	+1	+2	-2	-2	-1	-1	+2	+2	+3	+3	+3	+2	-1	+1
6	+5	+4	+2	+1	-2	-3	0	0	+1	+4	+3	+4	+4	+2	-1	+2
7	+7	+6	+4	-1	-2	-5	-1	-4	-2	+3	+5	+8	+6	+1	-3	+1
8	+4	+7	+7	-2	+1	-3	-2	-3	-1	+1	+3	+6	+5	+1	-2	+1
9	-3	+5	+6	+1	+9	+5	+2	+4	-2	0	+1	+3	+2	+1	+5	+3
10	-8	+2	+6	+2	+14	+12	+4	+8	0	0	0	+0	+1	+2	+9	+3
11	-7	+1	+4	+3	+13	+14	+7	+8	+2	+3	-1	-2	-2	+3	+10	+4
12	-6	-2	+2	+1	+12	+11	+8	+6	+2	+2	-1	-5	-3	+2	+9	+3
13	-5	-5	+1	+2	+6	+6	+6	+3	+2	-2	-3	-7	-5	+1	+5	0
14	-4	-5	+2	+3	+3	+4	+4	-1	-2	-4	-3	-6	-5	0	+2	-1
15	-2	-3	0	+2	-3	0	+2	-1	-3	-4	-3	-3	-3	-1	0	-2
16	-1	-3	-2	-1	-7	-3	+1	-2	-2	-3	-1	-1	-1	-2	-3	-2
17	+1	-4	-3	-3	-6	-4	-2	-3	0	-1	-1	+2	-1	-2	-4	-2
18	+3	-2	-2	-1	-3	-4	-2	+1	+1	0	-1	0	0	-1	-2	-1
19	+2	-2	-2	0	-3	-3	-1	+2	+3	+1	+1	0	0	0	-1	0
20	+2	-2	-2	0	-3	-3	-1	+1	+1	0	-1	0	0	0	-1	-1
21	+1	-1	-3	+1	-4	-3	-2	-1	+1	0	-1	-1	-1	0	-3	-1
22	-1	-2	-3	0	-4	-3	-3	-2	0	-1	-1	-2	-1	-1	-3	-2
23	0	-2	-3	-1	-3	-3	-3	-2	-1	-1	-1	-2	-1	-1	-3	-2
24	+1	-1	-4	-3	-3	-2	-4	-2	-1	-1	+1	-1	0	-2	-3	-2

1914.

1	0	-2	-1	-1	-3	-1	-2	0	0	+2	+1	+3	+1	0	-2	0
2	0	-2	0	0	-3	-3	-3	+2	+2	+3	+1	+4	+1	+1	-2	0
3	+1	-1	+1	0	-2	-1	-4	0	+2	+2	+2	+4	+2	+1	-2	0
4	+2	+1	+2	0	-1	-1	-4	0	+3	+3	+2	+5	+2	+2	-1	+1
5	+2	+1	+2	-1	0	-1	-3	-2	+4	+2	+2	+4	+2	+2	-1	+1
6	+2	0	-1	-3	+1	0	-4	-1	+4	+2	+3	+5	+3	0	-1	+1
7	+4	+4	-2	-6	0	-3	-7	-5	-4	0	+3	+6	+4	-3	-4	-1
8	+4	+5	-5	-5	-2	-4	-9	-7	-4	-1	+2	+4	+4	-4	-5	-2
9	+1	+5	-4	-3	0	-3	-2	-3	-3	-3	-1	-3	0	-3	-2	-1
10	-2	+2	-4	0	+1	+1	+5	+2	+1	-3	-3	-8	-3	-1	+2	-1
11	-2	+2	-2	0	+3	+4	+10	+7	+3	-1	-3	-14	-4	0	+6	+1
12	-4	0	+1	-2	+3	+5	+11	+8	+3	0	-5	-12	-5	0	+7	+1
13	-5	-1	+1	-1	+3	+5	+10	+6	0	-1	-5	-10	-5	0	+6	0
14	-3	-3	+1	+1	+1	+6	+8	+5	-3	-1	-4	-4	-4	0	+5	0
15	-1	-3	-1	+1	0	+3	+5	+2	-4	-4	-2	-1	-2	-2	+3	0
16	-1	-4	-2	-1	0	0	+2	-3	-3	-2	-2	+2	-1	-2	0	-1
17	0	-4	-3	-2	-1	-2	-2	-4	-1	-1	0	+2	-1	-2	-2	-2
18	+2	-1	+1	0	0	-1	-2	-4	+1	0	+2	+3	+2	+1	-2	0
19	+2	+1	+3	+1	0	0	0	-1	0	0	+2	+4	+2	+1	0	+1
20	0	+2	+4	+3	+1	0	0	+1	+1	+1	+2	+4	+1	+2	0	+1
21	0	-1	+2	+3	+2	-1	-1	-2	0	+1	+2	+2	+1	+2	-1	+1
22	0	0	+1	+4	0	-1	-3	0	+1	+1	+1	+1	0	+2	-1	0
23	0	-1	+2	+5	-1	-1	-3	+1	-1	+1	+1	+2	0	+2	-1	0
24	+1	-2	+1	+3	-1	-1	0	+1	-1	+2	+2	+3	+1	+1	0	+1

PORTO RICO MAGNETIC OBSERVATORY.

*Diurnal variation of D.**International quiet days, Greenwich mean time.*

1913.

Hour	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Group means			Year
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	+0.3	-0.1	-0.3	0.0	+0.1	-0.5	-0.4	-0.3	-0.2	-0.3	+0.2	+0.2	+0.2	-0.2	-0.3	-0.1
3	+0.3	-0.2	-0.1	0.0	+0.1	-0.4	-0.4	-0.2	-0.1	-0.3	+0.2	+0.2	+0.1	-0.1	-0.2	-0.1
4	+0.1	-0.2	-0.1	0.0	+0.2	-0.2	-0.4	-0.2	-0.1	-0.3	+0.2	+0.2	0.0	-0.1	-0.2	-0.1
5	-0.1	-0.3	-0.2	0.0	+0.1	-0.1	-0.4	-0.1	-0.1	-0.4	0.0	0.0	-0.1	-0.2	-0.1	-0.1
6	-0.3	-0.4	-0.3	+0.1	+0.1	0.0	-0.4	-0.1	-0.3	-0.4	-0.1	-0.1	-0.2	-0.2	-0.1	-0.2
7	-0.4	-0.5	-0.3	+0.2	+0.2	+0.1	-0.4	0.0	-0.3	-0.3	-0.2	-0.1	-0.3	-0.2	0.0	-0.2
8	-0.3	-0.4	-0.3	+0.3	+0.2	+0.2	-0.2	+0.2	-0.2	-0.3	-0.2	-0.2	-0.3	-0.1	+0.1	-0.1
9	-0.2	-0.2	-0.2	+0.4	+0.3	+0.3	-0.1	+0.4	0.0	-0.2	-0.2	-0.1	-0.2	0.0	+0.2	0.0
10	0.0	-0.1	-0.1	+0.6	+0.4	+0.5	+0.2	+0.7	+0.4	-0.1	0.0	0.0	-0.1	+0.2	+0.4	+0.2
11	+0.1	-0.2	0.0	+0.8	+1.0	+1.0	+0.9	+1.4	+0.9	+0.1	+0.2	+0.2	+0.1	+0.4	+1.1	+0.5
12	+0.9	0.0	+0.4	+1.4	+2.2	+2.0	+1.8	+2.6	+1.7	+0.4	+0.5	+0.1	+0.1	+0.9	+2.2	+1.1
13	+0.6	+0.6	+0.6	+1.8	+2.9	+2.6	+2.5	+3.1	+2.6	+1.2	+1.0	+0.3	+0.6	+1.5	+2.8	+1.6
14	+2.5	+0.9	+1.1	+1.7	+2.3	+2.1	+2.4	+2.2	+2.7	+2.1	+1.5	+0.9	+1.4	+1.9	+2.2	+1.9
15	+3.2	+1.7	+1.7	+1.2	+0.9	+1.1	+1.8	+0.9	+1.8	+2.2	+1.5	+1.3	+1.9	+1.7	+1.2	+1.6
16	+2.1	+1.8	+2.0	+0.6	-0.4	+0.2	+0.9	-0.1	+0.4	+1.7	+1.0	+1.1	+1.5	+1.2	+0.2	+0.9
17	-0.2	+1.3	+1.6	-0.2	-1.4	-0.7	-0.1	-0.8	-0.7	+0.9	+0.1	+0.4	+0.4	+0.4	-0.8	0.0
18	-1.9	+0.5	+0.7	-1.4	-2.3	-1.2	-0.9	-1.4	-1.5	0.0	-0.7	-0.4	-0.6	-0.6	-1.4	-0.9
19	-2.4	-0.2	-0.4	-2.1	-2.7	-1.3	-1.6	-1.8	-1.9	-0.7	-1.2	-0.9	-1.2	-1.3	-1.8	-1.4
20	-2.1	-0.7	-1.1	-2.2	-2.3	-1.3	-1.7	-1.9	-1.7	-1.2	-1.5	-1.2	-1.4	-1.6	-1.8	-1.6
21	-1.2	-0.9	-1.2	-1.7	-1.5	-1.2	-1.2	-1.7	-1.2	-1.3	-1.4	-1.2	-1.2	-1.4	-1.4	-1.3
22	-0.4	-0.7	-1.0	-0.9	-0.5	-0.9	-0.9	-1.2	-0.8	-1.1	-0.9	-0.8	-0.7	-1.0	-0.9	-0.8
23	0.0	-0.4	-0.8	-0.4	0.0	-0.8	-0.7	-0.7	-0.6	-0.8	-0.2	-0.2	-0.2	-0.6	-0.6	-0.5
24	+0.1	-0.2	-0.6	-0.1	0.0	-0.8	-0.5	-0.5	-0.4	-0.5	+0.1	+0.1	0.0	-0.4	-0.4	-0.3
25	+0.3	-0.1	-0.4	-0.1	0.0	-0.7	-0.4	-0.4	-0.3	-0.3	+0.2	+0.2	+0.2	-0.3	-0.4	-0.2

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1	0.0	+0.1	-0.1	-0.4	-0.5	-0.6	-0.4	+0.1	-0.3	0.0	0.0	+0.2	+0.1	-0.2	-0.4	-0.2
2	0.0	+0.1	+0.1	-0.4	-0.3	-0.4	-0.3	+0.1	-0.2	0.0	0.0	+0.2	+0.1	-0.1	-0.2	-0.1
3	-0.1	0.0	+0.2	-0.3	-0.2	-0.3	-0.1	0.0	-0.1	0.0	0.0	+0.2	0.0	0.0	-0.2	-0.1
4	-0.1	-0.1	+0.1	-0.2	-0.1	-0.2	0.0	0.0	-0.1	0.0	-0.1	0.0	-0.1	0.0	-0.1	-0.1
5	-0.2	-0.1	+0.1	-0.1	0.0	-0.3	+0.1	0.0	-0.1	-0.1	-0.4	-0.2	-0.2	0.0	0.0	-0.1
6	-0.3	-0.1	0.0	-0.1	+0.1	-0.2	+0.2	-0.1	-0.1	-0.1	-0.6	-0.2	-0.3	-0.1	0.0	-0.1
7	-0.3	-0.1	+0.1	0.0	+0.2	-0.1	+0.2	-0.2	0.0	-0.1	-0.7	-0.2	-0.3	0.0	0.0	-0.1
8	-0.3	-0.1	+0.1	0.0	+0.4	0.0	+0.4	0.0	+0.2	0.0	-0.6	-0.1	-0.3	+0.1	+0.2	0.0
9	-0.3	0.0	+0.1	+0.2	+0.5	+0.2	+0.7	+0.3	+0.4	0.0	-0.5	0.0	-0.2	+0.2	+0.4	+0.1
10	-0.2	0.0	+0.3	+0.6	+0.9	+0.8	+1.3	+0.9	+1.1	+0.1	-0.2	0.0	-0.1	+0.5	+1.0	+0.5
11	-0.2	0.0	+0.7	+1.4	+1.7	+1.9	+2.2	+2.3	+2.5	+0.4	0.0	-0.1	-0.1	+1.2	+2.0	+1.1
12	-0.1	0.0	+1.4	+2.0	+2.3	+2.7	+2.6	+3.3	+3.2	+1.0	+0.6	+0.4	+0.2	+1.9	+2.7	+1.5
13	+0.6	+0.2	+1.9	+2.1	+2.2	+2.4	+1.8	+2.8	+2.6	+1.5	+1.6	+1.4	+1.0	+2.0	+2.3	+1.8
14	+1.2	+0.4	+1.8	+2.0	+1.3	+1.5	+0.5	+1.4	+1.4	+1.3	+2.3	+2.2	+1.5	+1.6	+1.2	+1.4
15	+1.2	+0.4	+1.6	+1.5	+0.1	+0.5	-0.7	+0.1	0.0	+0.9	+2.1	+2.2	+1.5	+1.0	0.0	+0.8
16	+0.6	+0.4	+0.9	+0.4	-0.8	-0.4	-1.3	-0.8	-1.2	+0.4	+1.2	+1.0	+0.8	+0.1	-0.8	0.0
17	0.0	+0.2	-0.5	-0.7	-1.4	-0.9	-1.5	-1.7	-1.8	+0.2	0.0	-0.7	-0.1	-0.7	-1.4	-0.7
18	-0.3	0.0	-1.6	-1.4	-1.7	-1.1	-1.6	-2.2	-1.9	-0.1	-0.8	-1.6	-0.7	-1.2	-1.6	-1.2
19	-0.4	-0.2	-2.2	-1.8	-1.5	-1.2	-1.6	-2.4	-1.6	-0.6	-1.2	-1.8	-0.9	-1.6	-1.7	-1.4
20	-0.4	-0.3	-2.0	-1.7	-1.0	-1.1	-1.3	-2.0	-1.2	-1.3	-1.2	-1.7	-0.9	-1.6	-1.4	-1.3
21	-0.3	-0.3	-1.3	-1.2	-0.6	-0.9	-0.6	-1.1	-0.9	-1.6	-0.9	-1.1	-0.6	-1.2	-0.8	-0.9
22	-0.1	-0.2	-0.8	-0.8	-0.4	-0.8	-0.2	-0.4	-0.7	-1.2	-0.5	-0.3	-0.3	-0.9	-0.4	-0.5
23	0.0	-0.2	-0.5	-0.6	-0.6	-0.8	-0.3	-0.2	-0.6	-0.6	-0.1	+0.1	0.0	-0.6	-0.5	-0.4
24	0.0	0.0	-0.2	-0.5	-0.5	-0.7	-0.3	0.0	-0.5	-0.2	0.0	+0.1	0.0	-0.4	-0.4	-0.2

*Diurnal variation of H.**International quiet days, Greenwich mean time.*

1913.

Hour	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Group means			Year
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
1	-1	-5	-6	-5	-4	-3	-4	0	-1	-2	-3	-1	-3	-4	-3	-3
2	-1	-5	-6	-4	-4	-3	-3	0	-1	-2	-4	-2	-3	-3	-2	-3
3	-1	-5	-6	-3	-2	-3	-3	0	0	-1	-4	-3	-3	-2	-2	-3
4	-1	-4	-6	-2	-2	-3	-3	0	0	-1	-4	-3	-3	-2	-2	-2
5	0	-4	-5	-4	-2	-3	-3	-1	0	-1	-4	-3	-3	-2	-2	-2
6	+1	-4	-4	-5	-2	-3	-3	-2	0	-2	-3	-2	-2	-3	-2	-2
7	+2	-3	-3	-4	-2	-3	-3	-2	-1	-2	-2	-2	-1	-2	-2	-2
8	+3	-1	-2	-3	-2	-2	-3	-2	-1	-1	0	-1	0	-2	-2	-1
9	+4	+1	+1	-2	-2	-1	-3	-1	-1	0	+1	0	+2	0	-2	0
10	+4	+2	+3	-1	-3	-1	-2	-1	-1	+2	+2	+2	+2	+1	-2	0
11	+5	+4	+5	-1	-4	-1	-1	-1	0	+3	+4	+4	+4	+2	-2	+1
12	+5	+7	+8	0	-2	-1	-1	0	+2	+5	+6	+7	+6	+4	-1	+3
13	+2	+9	+9	+3	+7	+3	+2	+4	+2	+4	+7	+7	+6	+4	+4	+5
14	-2	+10	+8	+8	+17	+8	+7	+9	+3	+3	+7	+6	+5	+6	+10	+7
15	-4	+9	+8	+11	+21	+11	+9	+11	+5	+4	+6	+5	+4	+7	+13	+8
16	-4	+7	+8	+10	+16	+11	+10	+9	+6	+5	+4	+4	+3	+7	+12	+7
17	-4	+4	+5	+7	+12	+9	+7	+4	+5	+2	0	0	0	+5	+8	+4
18	-3	0	+2	+6	+4	+7	+4	0	+1	-2	-3	-4	-2	+2	+4	+1
19	-3	-2	-1	+5	-4	+3	+3	-5	-3	-5	-3	-5	-3	-1	-1	-2
20	-2	-3	-3	0	-10	-4	0	-7	-5	-6	-2	-5	-3	-4	-5	-4
21	-1	-3	-4	-3	-12	-7	-2	-6	-4	-4	-2	-4	-2	-4	-7	-4
22	-1	-4	-4	-3	-10	-7	-4	-4	-2	-2	-1	-2	-2	-3	-6	-4
23	-1	-4	-3	-3	-6	-4	-3	-2	-1	0	-1	-1	-2	-2	-4	-2
24	-1	-5	-4	-4	-4	-3	-2	-1	-2	0	-1	0	-2	-2	-2	-2

1914.

1	-1	-6	-5	-2	-2	-2	-6	-4	-2	-1	-1	0	-2	-2	-4	-3
2	-1	-6	-6	-1	-2	-1	-6	-4	-2	-1	-1	0	-2	-3	-3	-3
3	0	-6	-5	0	-2	-1	-5	-4	-2	-1	-1	0	-2	-2	-3	-2
4	0	-5	-6	+1	-3	-1	-4	-2	0	-2	-1	0	-2	-2	-2	-2
5	-1	-5	-6	0	-3	-1	-4	-1	0	-1	-1	0	-2	-2	-2	-2
6	-1	-5	-5	-2	-4	-1	-4	-1	-1	0	0	+1	-1	-2	-2	-2
7	-1	-4	-4	-3	-3	-2	-4	-1	0	+1	0	+1	-1	-2	-2	-2
8	-1	-4	-3	-3	-3	-1	-5	-1	0	+2	0	+1	-1	-1	-2	-1
9	0	-3	-2	-2	-2	-1	-5	-1	+2	+2	0	+1	0	0	-2	-1
10	0	-2	-2	-2	-1	0	-5	-1	+3	+1	0	+2	0	0	-2	-1
11	+2	+1	-1	-2	0	0	-5	-2	+2	+1	+1	+3	+2	0	-2	0
12	+4	+6	+1	0	0	0	-5	-3	0	+2	+3	+5	+4	+1	-2	+1
13	+4	+10	+4	+5	+3	+1	-2	+2	-1	+3	+3	+4	+5	+3	+1	+3
14	+4	+10	+8	+8	+7	+4	+6	+8	+2	+4	+3	+1	+4	+6	+6	+5
15	+5	+9	+11	+8	+9	+6	+14	+13	+7	+3	+2	-3	+3	+7	+10	+7
16	+3	+9	+13	+5	+10	+6	+18	+16	+10	+2	+2	-5	+2	+8	+12	+7
17	0	+8	+13	+2	+9	+5	+18	+15	+9	+1	+1	-5	+1	+6	+12	+6
18	-2	+6	+10	+2	+6	+3	+14	+8	+3	0	-1	-4	0	+4	+8	+4
19	-2	+3	+5	+1	+2	+1	+9	0	-3	-2	-3	-3	-1	0	+3	+1
20	-3	0	0	-1	-2	-1	+3	-6	-6	-5	-3	-2	-2	-3	-2	-2
21	-4	-2	-4	-4	-5	-3	-4	-10	-7	-5	-2	-1	-2	-5	-6	-4
22	-3	-4	-5	-5	-6	-5	-7	-9	-5	-2	-1	0	-2	-4	-7	-4
23	-2	-5	-5	-4	-4	-3	-6	-6	-4	-1	0	+1	-1	-4	-5	-3
24	-1	-5	-4	-3	-3	-2	-6	-4	-3	-1	0	+1	-1	-3	-4	-3

*Diurnal variation of X.**International quiet days, Greenwich mean time.*

1913.

Hour	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Group means			Year
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
2	-1	-5	-6	-4	-4	-3	-4	0	-1	-2	-3	-1	-3	-4	-3	-3
3	-1	-5	-6	-3	-2	-3	-3	0	-1	-2	-4	-2	-3	-3	-2	-3
4	-1	-4	-6	-2	-2	-3	-3	0	0	-1	-4	-3	-3	-2	-2	-2
5	0	-4	-5	-4	-2	-3	-3	-1	0	-1	-4	-3	-3	-2	-2	-2
6	+1	-4	-4	-5	-2	-3	-3	-2	0	-2	-3	-2	-2	-3	-2	-2
7	+2	-3	-3	-4	-2	-3	-3	-2	-1	-2	-2	-2	-1	-2	-2	-2
8	+3	-1	-2	-3	-2	-2	-3	-2	-1	-1	0	-1	0	-2	-2	-1
9	+4	+1	+1	-2	-2	-1	-3	-1	-1	0	+1	0	+2	0	-2	0
10	+4	+2	+3	-1	-3	-1	-2	0	-1	+2	+2	+2	+2	+1	-2	+1
11	+5	+4	+5	0	-3	0	0	0	+1	+3	+4	+4	+4	+2	-1	+2
12	+5	+7	+8	+1	-1	0	0	+1	+3	+6	+6	+7	+6	+5	0	+4
13	+3	+9	+10	+4	+8	+4	+3	+5	+3	+5	+8	+7	+7	+5	+5	+6
14	-1	+11	+9	+9	+17	+8	+8	+9	+4	+4	+8	+7	+6	+7	+11	+8
15	-3	+10	+9	+11	+21	+11	+9	+11	+5	+5	+6	+5	+5	+8	+13	+8
16	-4	+8	+9	+10	+15	+11	+10	+9	+6	+5	+4	+4	+3	+7	+11	+7
17	-5	+4	+5	+6	+11	+8	+7	+3	+4	+2	0	0	0	+4	+7	+4
18	-4	0	+2	+5	+3	+6	+3	-1	0	-2	-4	-4	-3	+1	+3	0
19	-4	-2	-1	+4	-5	+2	+2	-6	-4	-6	-4	-6	-4	-2	-2	-3
20	-3	-3	-4	-1	-11	-5	-1	-6	-6	-7	-3	-6	-4	-5	-6	-5
21	-1	-3	-4	-3	-12	-7	-2	-7	-4	-4	-2	-4	-2	-4	-7	-4
22	-1	-4	-4	-3	-10	-7	-4	-4	-2	-1	-1	-2	-2	-3	-6	-4
23	-1	-4	-3	-3	-6	-4	-3	-2	-1	0	-1	-1	-2	-2	-4	-2
24	-1	-5	-4	-4	-4	-3	-2	-1	-2	0	-1	0	-2	-2	-2	-2

1914.

1	-1	-6	-5	-2	-2	-2	-6	-4	-2	-1	-1	0	-2	-2	-4	-3
2	-1	-6	-6	-1	-2	-1	-6	-4	-2	-1	-1	0	-2	-3	-3	-3
3	0	-6	-5	0	-2	-1	-5	-4	-2	-1	-1	0	-2	-2	-3	-2
4	0	-5	-6	+1	-3	-1	-4	-2	0	-2	-1	0	-2	-2	-2	-2
5	-1	-5	-6	0	-3	-1	-4	-1	0	-1	-1	0	-2	-2	-2	-2
6	-1	-5	-5	-2	-4	-1	-4	-1	-1	0	0	+1	-1	-2	-2	-2
7	-1	-4	-4	-3	-3	-2	-4	-1	0	+1	0	+1	-1	-2	-2	-2
8	-1	-4	-3	-3	-3	-1	-5	-1	0	+2	0	+1	-1	-1	-2	-1
9	0	-3	-2	-2	-2	-1	-5	-1	+2	+2	0	+1	0	0	-2	-1
10	0	-2	-2	-2	-1	0	-4	-1	+3	+1	0	+2	0	0	-2	-1
11	+2	+1	-1	-1	+1	+1	-4	-1	+3	+1	+1	+3	+2	+1	-1	+1
12	+4	+6	+2	+1	+1	+1	-4	-2	+1	+2	+3	+5	+4	+2	-1	+2
13	+4	+10	+5	+6	+4	+2	-1	+3	0	+4	+4	+5	+6	+4	+2	+4
14	+5	+10	+9	+9	+8	+5	+6	+9	+3	+5	+4	+2	+5	+7	+7	+6
15	+6	+9	+12	+9	+9	+6	+14	+13	+7	+3	+3	+2	+4	+8	+10	+7
16	+3	+9	+13	+5	+10	+6	+17	+16	+9	+2	+3	-5	+2	+7	+12	+7
17	0	+8	+13	+2	+8	+5	+17	+14	+8	+1	+1	-5	+1	+6	+11	+6
18	-2	+6	+9	+1	+5	+3	+13	+7	+2	0	-1	-5	0	+3	+7	+3
19	-2	+3	+4	0	+1	0	+8	-1	-4	-2	-4	-4	-2	-1	+2	0
20	-3	0	-1	-2	-2	-1	+2	-7	-7	-6	-4	-3	-2	-4	-2	-3
21	-4	-2	-5	-5	-5	-3	-4	-10	-7	-6	-2	-1	-2	-6	-6	-5
22	-3	-4	-5	-5	-6	-5	-7	-9	-5	-3	-1	0	-2	-4	-7	-4
23	-2	-5	-5	-4	-4	-3	-6	-6	-4	-1	0	+1	-1	-4	-5	-3
24	-1	-5	-4	-3	-3	-2	-6	-4	-3	-1	0	+1	-1	-3	-4	-3

*Diurnal variation of Y.**International quiet days, Greenwich mean time.*

1913.

Hour	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Group means			Year
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
1	+3	-1	-2	0	+1	-4	-3	-2	-2	-2	+2	+2	+2	-1	-2	-1
2	+3	-1	-1	0	+1	-3	-3	-2	-1	-2	+2	+2	+2	-1	-2	0
3	+1	-1	-1	0	+2	-2	-3	-2	-1	-2	+2	+1	+1	-1	-1	0
4	-1	-2	-1	0	+1	-1	-3	-1	-1	-3	0	0	-2	-2	-1	-1
5	-2	-3	-2	+1	+1	0	-3	-1	-2	-3	-1	-1	-2	-2	-1	-1
6	-3	-4	-2	+2	+2	+1	-3	0	-2	-2	-2	-1	-2	-1	0	-1
7	-3	-4	-2	+3	+2	+2	-2	+2	-2	-2	-2	-2	-3	-1	+1	-1
8	-3	-3	-2	+3	+3	+3	-1	+3	0	-2	-2	-2	-3	0	+2	0
9	-2	-2	-2	+5	+3	+4	+2	+6	+3	-1	0	0	-1	+1	+4	0
10	0	-1	-1	+7	+8	+8	+8	+12	+7	+1	+2	+2	-1	+3	+9	+1
11	+1	-2	0	+12	+17	+15	+15	+22	+14	+3	+4	+1	+1	+7	+13	+4
12	+7	0	+3	+15	+24	+22	+21	+26	+21	+10	+8	+2	+4	+12	+23	+9
13	+21	+7	+9	+14	+19	+17	+20	+18	+22	+17	+12	+7	+12	+16	+18	+15
14	+27	+14	+14	+10	+7	+9	+15	+7	+15	+18	+12	+10	+16	+14	+9	+13
15	+18	+14	+16	+4	-4	+1	+7	-1	+3	+14	+8	+9	+12	+9	+1	+7
16	-1	+10	+13	-2	-12	-6	-1	-7	-6	+7	+1	+3	+3	+3	-7	0
17	-16	+4	+6	-12	-20	-10	-8	-12	-13	0	-6	-3	-5	-5	-12	-8
18	-20	-2	-3	-18	-23	-11	-13	-15	-16	-6	-10	-7	-10	-11	-15	-12
19	-17	-6	-9	-18	-19	-11	-14	-15	-14	-10	-12	-10	-11	-13	-15	-13
20	-10	-7	-10	-14	-12	-10	-10	-14	-10	-10	-11	-10	-10	-11	-11	-11
21	-3	-6	-8	-7	-4	-7	-7	-6	-6	-9	-7	-6	-6	-8	-7	-7
22	0	-3	-6	-3	+1	-6	-6	-10	-5	-7	-2	-2	-2	-5	-4	-4
23	+1	-1	-5	-1	0	-6	-4	-4	-3	-4	+1	+1	0	-3	-3	-2
24	+3	-1	-3	-1	0	-6	-3	-3	-2	-2	+2	+2	+2	-2	-3	-1

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1	0	+1	-1	-3	-4	-5	-3	+1	-2	0	0	+2	+1	-2	-3	-1
2	0	+1	+1	-3	-2	-3	-2	+1	-2	0	0	+2	+1	-2	-2	-1
3	-1	0	+2	-2	-2	-2	-1	0	-1	0	0	+2	0	0	-1	0
4	-1	-1	+1	-2	-1	-2	0	0	-1	0	-1	0	-1	0	-1	-1
5	-2	-1	+1	-1	0	-2	+1	0	-1	-1	-3	-2	-2	0	0	-1
6	-2	-1	0	-1	+1	-2	+2	-1	-1	-1	-5	-2	-2	-1	0	-1
7	-2	-1	+1	0	+2	-1	+2	-2	0	-1	-6	-2	-3	0	0	-1
8	-2	-1	+1	0	+3	0	+4	0	+2	0	-5	-1	-2	+2	+2	0
9	-2	0	+1	+2	+4	+2	+6	+3	+3	0	-4	0	-2	+2	+4	+1
10	-2	0	+3	+5	+8	+7	+11	+7	+9	+1	-2	0	-1	+4	+8	+4
11	-2	0	+6	+12	+14	+16	+18	+19	+21	+3	0	-1	-1	+10	+17	+9
12	-1	0	+12	+17	+19	+22	+22	+27	+26	+8	+5	+3	+2	+16	+22	+13
13	+5	+1	+16	+17	+18	+20	+15	+23	+22	+12	+13	+11	+7	+17	+19	+14
14	+10	+3	+14	+16	+10	+12	+4	+11	+11	+11	+19	+18	+13	+13	+9	+12
15	+10	+3	+13	+12	0	+4	-7	0	0	+7	+17	+18	+12	+8	+1	+6
16	+5	+3	+7	+3	-7	-4	-12	-7	-10	+3	+10	+9	+7	+1	-8	0
17	0	+1	-5	-6	-12	-8	-13	-15	-15	+2	0	+6	+1	-6	-12	-6
18	-2	0	-14	-12	-14	-9	-14	-19	-16	-1	-7	-13	-6	-11	-14	-10
19	-3	-2	-18	-15	-13	-10	-14	-20	-13	-5	-10	-15	-7	-13	-14	-11
20	-3	-2	-17	-14	-8	-9	-11	-16	-10	-10	-10	-14	-7	-13	-11	-10
21	-2	-2	-11	-10	-5	-7	-5	-9	-7	-13	-7	-9	-5	-10	-6	-7
22	-1	-1	-6	-6	-3	-6	-1	-3	-6	-10	-4	-2	-2	-7	-3	-4
23	0	-1	-4	-5	-5	-6	-2	-1	-5	-5	-1	+1	-2	-5	-4	-3
24	0	0	-1	-4	-4	-6	-2	0	-4	-2	0	+1	0	-3	-3	-2

*Diurnal variation of Z.**International quiet days, Greenwich mean time.*

1913.

Hour	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Group means			Year
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
1	+2	+3	+1	+3	0	+1	-1	0	+4	+2	+2	0	+2	+3	0	+1
2	+2	+2	+1	+2	0	+1	-2	-2	+3	+2	+1	-1	+1	+2	-1	+1
3	+2	+2	+1	+1	-1	+1	-3	-2	+2	+2	+1	-1	+1	+2	-1	0
4	+2	+2	+1	0	-2	0	-3	-3	+2	+2	+1	0	+1	+1	-2	0
5	+2	+2	+2	-2	-2	0	-4	-3	+1	+1	+1	+1	+2	0	-2	0
6	+1	+1	+2	-1	-2	0	-5	-3	+2	+1	+1	+2	+1	+1	-3	0
7	+1	+2	+1	-1	-2	0	-4	-3	+1	+1	+2	+3	+2	0	-2	0
8	+1	+3	+1	0	-1	0	-3	-1	+2	+2	+3	+4	+3	+1	-1	+1
9	+2	+3	+1	+1	0	+1	-1	0	+2	+3	+3	+4	+3	+2	0	+2
10	+3	+3	+1	+2	0	+1	+1	+1	+2	+3	+3	+3	+3	+2	+1	+2
11	+4	+4	+1	+1	-1	0	+1	-2	0	+3	+2	+4	+4	+1	0	+1
12	+3	+4	0	-1	-4	-2	-1	-4	-4	+1	0	+2	+2	-1	-3	0
13	-2	+2	0	-2	-4	-2	-2	-1	-7	-2	-3	-1	-1	-3	-2	-2
14	-8	-1	-1	-3	-2	-1	0	+3	-8	-4	-6	-4	-5	-4	0	-3
15	-9	-4	-2	-4	+1	0	+2	+3	-6	-4	-7	-6	-6	-4	+2	-3
16	-5	-7	-3	-4	+2	+1	+2	+2	-4	-5	-5	-7	-6	-4	+2	-3
17	-2	-8	-4	-3	+3	-1	+4	+1	-2	-5	-3	-6	-5	-3	+2	-2
18	-2	-8	-4	-2	+3	-3	+4	0	-1	-4	-2	-4	-4	-3	+1	-2
19	-2	-6	-3	0	+4	-1	+5	+1	-1	-3	-2	-1	-3	-2	+2	-1
20	-1	-3	-2	+1	+3	+2	+5	+2	0	-2	0	+3	0	-1	+3	0
21	0	0	0	+1	+1	+1	+2	+2	+2	0	+1	+4	+1	+1	+2	+1
22	+1	+1	+1	+3	+1	0	+1	+3	+3	+1	+1	+3	+1	+2	+1	+2
23	+2	+2	+1	+4	+2	+2	+1	+3	+4	+2	+2	+1	+2	+3	+2	+2
24	+2	+2	+1	+4	+2	0	0	+2	+3	+2	+2	0	+2	+2	+1	+2

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1	+4	+6	+9	+7	0	+2	+1	+2	+3	+3	+5	+3	+4	+6	+1	+4
2	+2	+6	+8	+7	-1	+1	+1	+2	+3	+4	+5	+2	+4	+5	+1	+3
3	+2	+5	+7	+5	-2	+1	+1	+3	+3	+4	+5	+1	+3	+5	+1	+3
4	+2	+5	+6	+4	-3	+1	+1	+3	+3	+5	+4	+2	+3	+5	0	+3
5	+2	+4	+5	+1	-3	+1	+2	+3	+3	+5	+3	+4	+3	+4	+1	+3
6	+2	+3	+3	0	-2	0	+2	+1	+3	+5	+2	+5	+3	+3	0	+2
7	+3	+4	+3	-1	-2	-1	+1	+1	+4	+4	+2	+5	+3	+3	0	+2
8	+4	+4	+3	-1	0	-1	0	0	+5	+3	+1	+5	+4	+2	0	+2
9	+5	+4	+3	0	+1	-1	0	0	+6	+2	+1	+4	+3	+3	0	+2
10	+4	+3	+2	-1	+2	-1	-1	0	+5	0	+1	+4	+3	+2	0	+2
11	+4	+2	-1	-2	+1	-3	-4	-3	0	-2	+3	+4	+3	-1	-2	0
12	+2	+1	-6	-4	-1	-5	-8	-8	-5	-6	+1	+2	+2	-5	-6	-3
13	-2	-2	-11	-4	-3	-5	-8	-9	-6	-8	-2	-3	-2	-7	-6	-5
14	-8	-5	-13	-4	-2	-3	-5	-4	-7	-9	-6	-8	-7	-8	-4	-6
15	-12	-7	-13	-6	-1	-1	-2	0	-6	-8	-8	-12	-10	-8	-1	-6
16	-12	-8	-13	-7	+1	+1	-1	0	-6	-6	-8	-13	-10	-8	0	-6
17	-11	-9	-10	-5	+3	+1	0	0	-5	-4	-7	-9	-9	-6	+1	-5
18	-8	-9	-6	-2	+5	+3	+2	+1	-4	-2	-5	-5	-7	-4	+3	-3
19	-3	-8	-2	0	+5	+4	+4	+2	-2	-1	-3	-2	-4	-1	+4	0
20	+1	-6	+1	+1	+3	+3	+5	+1	-2	+1	-2	0	-2	0	+3	0
21	+3	-2	+3	+1	+1	+2	+4	-1	0	+3	0	+2	+1	+1	+2	+1
22	+5	+1	+6	+1	-1	+1	+2	0	+2	+3	+2	+3	+3	+3	0	+2
23	+6	+5	+7	+3	0	+1	+2	+1	+3	+2	+3	+3	+3	+4	+1	+3
24	+5	+6	+8	+6	0	+1	+1	+2	+2	+2	+4	+2	+4	+5	+1	+3

SUMMARY OF MONTHLY AND ANNUAL MEANS.

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Summary of monthly means.

1913.

Month	D	H	I	X	Y	Z	F
	° /	γ	° /	γ	γ	γ	γ
January.....	-2 44.6	28566	50 15.8	28533	-1367	34363	44686
February.....	45.5	569	15.6	536	1375	363	688
March.....	46.5	561	16.4	527	1383	369	687
April.....	47.3	548	18.3	515	1389	392	697
May.....	48.5	535	20.4	501	1398	420	710
June.....	49.2	533	21.1	498	1404	431	718
July.....	50.2	523	21.9	489	1412	435	714
August.....	50.8	510	22.9	475	1416	440	710
September.....	51.8	494	24.2	458	1423	448	705
October.....	52.6	484	25.2	448	1429	455	704
November.....	53.7	475	26.2	439	1438	465	706
December.....	54.8	464	27.0	428	1447	469	702
Mean.....	-2 49.6	28522	50 21.2	28487	-1407	34421	44702

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January.....	-2 55.4	28448	50 28.3	28411	-1451	34475	44696
February.....	56.4	443	28.9	406	1459	481	698
March.....	57.4	434	30.2	396	1467	497	705
April.....	58.5	415	32.1	377	1475	513	705
May.....	59.3	415	32.5	377	1481	521	712
June.....	-3 00.0	405	33.8	365	1487	536	717
July.....	00.9	402	34.5	363	1494	546	723
August.....	01.7	388	35.1	348	1500	541	710
September.....	02.5	386	36.2	346	1506	561	724
October.....	03.3	368	37.7	328	1512	570	720
November.....	03.9	355	38.6	315	1516	573	714
December.....	04.9	349	39.3	308	1524	581	716
Mean.....	-3 00.4	28401	50 33.9	28362	-1489	34533	44712

Summary of annual means.

Year	D	H	I	X	Y	Z	F
	° /	γ	° /	γ	γ	γ	γ
1903.....	-1 23.2	29336	49 10.0	29327	-709	33946	44865
1904.....	1 31.0	266	15.0	256	775	33965	834
1905.....	1 38.3	221	17.0	209	835	33952	795
1906.....	1 45.9	173	22.1	159	899	33999	799
1907.....	1 53.7	106	29.3	090	962	34066	806
1908.....	2 02.5	021	36.3	29003	1034	106	782
1909.....	2 11.7	28927	44.1	28905	1107	151	755
1910.....	2 20.6	834	49 52.0	810	1179	202	734
1911.....	2 29.9	739	50 00.4	712	1253	258	716
1912.....	2 39.0	638	09.0	607	1325	312	692
1913.....	2 49.6	522	21.2	487	1407	421	702
1914.....	-3 00.4	401	33.9	362	-1489	533	712

JANUARY, 1913.

2° WEST PLUS TABULAR QUANTITIES.

Day	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h
1	44.2	44.3	44.6	44.7	44.7	44.6	44.7	43.1	....	....	....	....	....	....	....
2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
4	44.7	44.7	44.7	44.7	44.7	45.0	44.9	43.5	42.2	42.0	42.6	43.9	45.1	46.1	45.8
5	44.6	45.1	44.9	45.1	44.9	44.6	44.9	43.9	42.0	41.4	41.6	43.9	45.6	46.8	46.5
6*	44.8	44.9	45.0	44.8	44.6	44.5	44.4	43.1	41.4	40.6	40.9	43.6	45.9	46.4	45.7
7*†	44.8	44.9	44.9	44.8	44.5	44.4	44.4	42.6	40.7	40.7	42.5	44.4	46.4	46.4	45.8
8	44.9	45.3	44.9	44.7	44.6	44.4	44.5	43.6	41.8	41.5	41.6	44.5	46.4	47.1	46.4
9	44.6	44.6	44.8	44.8	44.6	44.6	44.4	42.7	40.6	39.4	41.8	45.8	46.9	46.7	45.6
10	44.3	44.5	44.7	44.4	44.6	44.4	43.6	42.4	39.8	41.8	44.7	47.6	48.3	47.2	45.9
11	44.6	44.7	44.9	44.6	44.5	44.4	44.4	42.7	41.0	40.8	42.9	45.5	46.9	46.7	45.7
12*†	44.9	44.9	44.9	44.8	44.6	44.6	44.6	43.0	41.6	40.8	43.6	47.5	48.5	48.4	47.1
13*	44.7	44.8	44.8	44.8	44.6	44.6	44.7	43.7	42.0	39.7	42.4	46.6	48.4	48.2	47.2
14	44.6	44.6	44.9	45.0	45.0	44.7	44.6	43.6	41.6	40.5	43.5	46.4	47.6	47.3	46.9
15	44.8	45.3	45.3	45.4	45.3	44.7	44.5	43.0	41.5	40.6	43.1	46.2	46.8	46.3	45.6
16*†	44.8	45.1	44.9	44.8	44.9	44.6	44.4	42.5	40.3	40.5	43.6	45.6	46.5	46.6	45.9
17	44.9	45.0	45.0	44.7	44.7	44.6	44.6	43.6	41.4	42.2	46.4	49.4	49.4	47.7	45.8
18	44.0	44.5	44.5	44.6	44.6	44.3	44.6	43.4	41.6	43.3	45.3	45.9	46.3	45.4	45.6
19	44.9	45.2	44.9	44.9	45.0	44.6	44.9	44.6	43.2	43.4	44.4	46.4	46.9	45.9	45.5
20	44.5	44.5	44.5	44.5	44.5	44.5	44.4	43.5	42.0	41.1	41.2	43.0	44.5	45.7	45.5
21*	45.2	44.8	44.7	44.7	44.6	44.6	44.8	44.4	43.1	42.9	43.8	45.7	46.4	46.0	45.1
22*	44.6	44.6	44.6	44.4	44.6	44.6	44.4	42.9	41.9	42.3	43.7	44.8	45.7	45.5	45.5
23	44.6	44.9	44.5	44.2	44.2	43.9	44.0	43.8	44.3	44.6	45.7	46.8	47.3	46.7	44.7
24*†	45.4	45.0	45.4	45.1	44.9	44.6	44.5	43.7	42.8	43.6	44.5	46.5	46.6	46.8	46.9
25	45.3	45.5	45.2	44.9	45.0	44.6	44.7	44.6	44.2	44.5	45.6	46.1	46.3	46.5	46.0
26	44.6	44.9	44.7	44.8	44.7	44.7	44.4	42.4	41.6	41.6	43.4	45.3	46.6	46.7	46.4
27*	45.4	45.5	45.5	45.5	45.3	45.0	44.6	43.4	42.1	42.1	44.2	46.0	46.1	46.4	46.0
28	45.4	45.5	45.5	45.5	45.3	44.7	44.2	42.5	41.4	42.8	46.7	48.4	47.8	47.8	47.4
29*	45.2	45.2	45.4	45.5	45.7	45.5	45.2	44.2	42.7	42.5	43.7	45.0	46.0	46.8	46.9
30	45.2	45.4	45.6	48.3	45.4	44.8	46.4	44.9	41.8	40.9	42.2	45.3	46.6	46.9	47.3
31	45.3	45.4	45.6	45.4	46.0	45.4	45.7	45.4	44.4	44.2	43.7	44.2	44.8	45.6	45.5
Mean.....	44.8	45.0	45.0	45.0	44.9	44.6	44.6	43.5	42.0	41.9	43.5	45.7	46.7	46.7	46.1
Mean*.....	45.0	45.0	45.0	44.9	44.8	44.7	44.6	43.4	41.9	41.6	43.3	45.6	46.6	46.8	46.2
Mean†.....	45.0	45.0	45.0	44.9	44.7	44.6	44.5	43.0	41.4	41.4	43.6	46.0	47.0	47.0	46.4

FEBRUARY, 1913.

2° WEST PLUS TABULAR QUANTITIES.

1*	45.3	45.3	45.5	45.5	45.5	45.3	45.5	45.3	43.5	42.6	42.5	43.9	45.7	47.0	47.5
2*	45.6	45.6	45.5	45.4	45.4	45.4	45.8	45.0	43.5	43.3	43.9	44.8	45.5	45.7	45.8
3*†	45.7	45.6	45.5	45.4	45.3	45.4	45.8	45.4	44.2	43.7	44.1	44.9	45.6	45.7	45.7
4*†	45.7	45.7	45.7	45.5	45.5	45.3	45.4	44.4	43.4	43.4	43.9	44.9	46.2	47.0	46.4
5*	45.5	45.5	45.5	45.5	45.3	45.3	45.3	44.4	43.7	43.5	44.6	46.2	46.8	46.8	46.0
6*	45.8	46.0	46.2	46.1	45.9	45.3	45.4	44.5	43.5	43.7	45.2	46.5	47.2	46.7	46.8
7	45.5	45.5	45.6	45.5	45.5	45.3	45.5	45.2	43.7	43.3	43.9	45.5	46.6	47.3	47.8
8	45.7	45.8	45.8	45.9	45.6	45.6	45.8	45.0	43.7	42.6	42.6	44.0	45.3	46.7	47.2
9	45.6	45.6	45.6	45.6	45.6	45.4	46.0	44.9	43.4	42.2	42.6	44.8	46.4	47.1	47.6
10*	45.6	45.6	45.6	45.6	45.6	45.6	45.6	44.2	42.6	42.1	43.2	44.9	46.0	47.0	47.4
11	45.7	45.9	46.0	46.1	45.8	45.6	46.0	45.1	43.6	42.4	42.6	44.4	45.8	46.6	46.9
12	46.7	44.9	45.4	45.7	45.7	45.4	45.6	45.4	44.0	43.6	42.9	43.7	44.9	46.6	47.6
13	45.6	45.6	45.6	46.7	45.9	45.6	46.1	45.5	44.7	43.8	42.8	42.9	44.1	46.3	47.8
14	45.7	46.4	45.1	44.7	45.4	44.8	47.4	47.2	44.6	44.2	43.6	43.6	44.3	45.7	47.4
15	45.4	45.7	45.7	46.6	45.9	45.8	45.8	45.7	44.4	43.5	42.9	43.8	44.9	46.2	47.0
16	45.9	45.9	45.8	46.0	45.8	45.7	45.8	45.0	43.9	43.7	43.9	44.8	45.8	47.6	47.8
17	45.7	45.7	45.7	45.7	45.7	45.5	45.9	45.2	44.7	44.0	44.8	46.4	47.2	47.1	47.7
18	45.8	45.8	45.9	45.8	45.7	45.8	46.9	45.9	44.7	43.8	44.0	44.7	46.0	47.1	47.8
19	46.1	46.1	45.9	46.0	45.7	45.8	46.7	45.4	44.8	44.5	44.8	45.9	46.7	46.7	46.4
20	46.0	45.8	45.9	45.7	45.7	45.7	46.2	45.6	43.7	42.7	42.6	44.6	46.3	47.6	47.8
21	46.0	45.6	45.8	45.9	45.7	45.2	45.9	45.0	44.0	43.4	43.7	45.0	46.1	46.7	46.6
22*	46.4	46.6	46.8	46.7	45.8	45.8	45.8	44.8	43.8	43.2	43.7	44.8	45.8	46.9	47.4
23*†	46.8	46.8	46.8	46.3	46.2	46.1	46.7	45.9	44.9	44.1	44.2	44.8	45.6	47.0	48.1
24†	46.3	46.6	46.7	46.2	46.1	45.9	46.0	45.7	44.6	44.1	44.8	45.8	46.5	47.1	47.2
25	46.4	46.8	46.8	46.8	46.4	46.6	46.7	45.7	44.7	43.8	44.3	45.9	46.9	47.2	47.2
26	46.7	46.8	46.8	46.7	47.2	46.4	46.4	45.8	44.0	43.1	43.5	44.0	44.1	44.8	45.1
27	46.8	46.7	46.4	46.2	46.2	46.1	46.7	46.2	45.7	45.3	45.4	45.6	44.8	44.8	45.3
28*†	46.5	46.5	46.4	46.4	46.2	46.2	46.3	45.3	44.3	43.7	43.2	43.7	43.9	44.8	45.5
Mean.....	45.9	45.9	45.9	45.9	45.8	45.6	46.0	45.3	44.1	43.5	43.7	44.8	45.8	46.6	47.0
Mean*.....	45.9	45.9	46.0	45.8	45.7	45.6	45.8	44.9	43.7	43.3	43.8	44.9	45.8	46.5	46.7
Mean†.....	46.2	46.2	46.2	46.0	45.9	45.8	46.0	45.3	44.3	43.8	44.0	44.8	45.6	46.3	46.6

* Ten least disturbed days.

† Five international quiet days. Jan. 1 missing.

HOURLY VALUES OF DECLINATION.

29

JANUARY, 1913.

2° WEST PLUS TABULAR QUANTITIES.

16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean	Maximum		Minimum		Range	Day
										h	m	h	m		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	.....	1
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	.....	2
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..	..	..	..	.....	3
45.4	44.5	44.0	43.9	43.6	43.9	44.1	44.1	44.6	44.3	14	00	46.1	9 31	41.6	4.5
45.5	44.6	44.4	44.2	44.0	43.5	44.3	44.5	44.6	44.4	14	17	47.3	10 00	41.4	5.9
44.8	44.4	44.2	44.1	44.3	44.2	44.4	44.4	44.7	44.2	14	00	46.4	10 10	40.3	6.1
44.6	44.4	43.9	43.8	43.7	43.8	44.2	44.5	44.7	44.2	13	18	46.6	9 27	40.5	6.1
45.4	44.6	44.4	44.1	43.9	44.0	44.0	44.5	44.6	44.4	14	00	47.1	10 40	41.4	5.7
44.6	44.6	44.4	44.4	44.3	43.6	43.7	44.0	44.4	44.2	13	33	47.0	10 10	39.3	7.7
44.7	44.5	44.6	44.3	44.2	44.2	44.3	44.6	44.5	44.5	12	55	48.3	9 00	39.8	8.5
45.0	44.8	44.4	44.3	44.3	44.1	43.9	44.3	44.6	44.3	13	21	47.1	9 51	40.7	6.4
45.4	44.4	44.0	44.4	44.0	44.3	44.4	44.6	44.6	44.7	13	00	48.5	10 00	40.8	7.7
45.6	44.8	44.4	44.1	43.9	43.9	44.3	44.4	44.6	44.6	13	00	48.4	10 00	39.7	8.7
45.8	44.7	44.3	43.8	43.9	43.9	44.3	44.5	44.6	44.6	13	00	47.6	10 00	40.5	7.1
44.2	43.8	44.0	44.4	41.4	44.4	44.4	44.5	44.6	44.5	13	00	46.8	9 35	40.4	6.4
45.2	45.1	45.0	44.6	44.6	44.3	44.3	44.5	44.6	44.5	13	20	47.0	9 25	39.6	7.4
44.5	44.4	44.4	44.4	44.2	44.0	43.9	44.3	43.9	44.9	12	27	49.7	9 21	40.4	9.3
45.5	44.6	44.6	44.4	42.9	43.8	44.0	44.1	44.4	44.4	12	48	46.4	9 07	41.4	5.0
44.6	44.5	44.6	44.3	44.0	44.5	44.4	44.4	44.5	44.8	12	45	47.0	9 28	43.0	4.0
44.6	44.4	44.5	44.4	43.8	43.8	44.2	44.3	44.5	44.0	14	00	45.7	10 16	40.7	5.0
44.6	44.5	44.6	44.6	44.6	44.5	44.6	44.6	44.6	44.7	13	00	46.4	9 43	42.6	3.8
45.4	44.1	44.8	44.7	44.5	44.3	44.4	44.5	44.7	44.4	13	00	45.7	9 00	41.9	3.8
44.8	44.4	44.5	44.6	44.6	44.5	44.9	45.1	45.1	44.9	13	00	47.3	8 00	43.8	3.5
45.7	45.2	45.2	45.0	44.6	44.5	44.5	44.7	45.0	45.0	14	18	47.0	9 00	42.8	4.2
(45.3)	(44.9)	44.3	44.4	44.4	44.4	44.4	44.4	45.0	45.0	13	58	46.6	9 00	44.2	2.4
45.6	45.3	45.1	45.0	44.9	44.9	45.1	44.8	45.3	44.7	14	00	46.7	9 20	41.4	5.3
45.4	44.8	45.2	45.2	45.1	44.8	44.7	45.1	45.2	44.9	14	00	46.4	9 30	41.4	5.0
47.2	46.1	45.2	45.2	44.8	45.2	45.2	44.9	45.2	45.4	12	00	48.4	9 13	41.2	7.2
46.3	46.0	45.3	45.4	45.0	44.8	44.9	44.8	44.9	45.1	15	00	46.9	9 12	42.3	4.6
46.4	45.6	45.1	44.6	44.8	44.8	44.7	44.4	45.1	45.1	4 00		48.3	10 15	40.5	7.8
45.4	45.3	45.2	45.2	45.2	44.4	45.2	45.2	45.2	45.1	5 15		46.3	11 10	43.6	2.7
45.3	44.8	44.6	44.5	44.3	44.2	44.4	44.5	44.7	44.6					5.8	
45.3	44.9	44.7	44.6	44.4	44.3	44.5	44.6	44.8	44.6					5.7	
45.2	44.8	44.5	44.4	44.4	44.3	44.4	44.6	44.7	44.6						

FEBRUARY, 1913.

2° WEST PLUS TABULAR QUANTITIES.

16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean	Maximum		Minimum		Range	Day
										h	m	h	m		
46.6	46.0	45.6	45.4	45.3	45.3	45.3	45.5	45.5	45.3	15	00	47.5	11 00	42.5	5.0
45.5	45.5	45.6	45.5	45.5	45.5	45.6	45.5	45.6	45.2	15	00	45.8	10 00	43.3	2.5
45.6	45.5	45.4	45.3	45.3	45.4	45.5	45.5	45.7	45.3	14	30	45.8	10 00	43.7	2.1
46.0	45.5	45.3	44.9	44.9	45.0	45.2	45.3	45.4	45.2	14	00	47.0	9 45	43.1	3.9
45.6	45.4	45.5	45.3	45.3	45.3	45.4	45.6	45.7	45.4	13	00	46.8	9 28	43.5	3.3
45.9	45.3	45.3	45.1	45.1	45.3	45.2	45.4	45.5	45.5	13	00	47.2	9 00	43.5	3.7
47.5	46.3	45.5	45.3	45.3	45.3	45.4	45.5	45.5	45.6	15	00	47.8	10 00	43.3	4.5
46.7	46.2	45.7	45.6	45.3	45.0	45.1	45.4	45.4	45.3	15	00	47.2	10 12	42.5	4.7
47.2	46.4	45.6	45.6	45.1	45.0	45.1	45.3	45.4	45.4	15	00	47.6	10 15	42.0	5.6
47.2	46.6	45.9	45.6	45.5	45.5	45.5	45.6	45.6	45.4	15	30	47.5	10 00	42.1	5.4
46.5	45.9	45.6	45.6	45.5	45.4	45.4	45.2	45.0	45.4	15	00	46.9	10 30	42.1	4.8
47.7	46.8	45.9	45.7	45.4	45.4	45.3	45.0	45.1	45.4	16	00	47.7	11 08	42.8	4.9
47.9	46.8	46.1	45.7	45.6	45.6	45.6	45.6	45.6	45.6	15	30	48.0	11 33	42.6	5.4
47.8	47.3	46.1	45.7	45.6	43.1	44.6	45.2	44.5	45.4	7 03		48.6	9 30	43.0	5.6
47.0	46.7	46.1	45.7	45.2	45.4	45.1	45.6	45.8	45.5	16	00	47.0	10 39	42.6	4.4
47.7	46.7	46.2	45.9	45.7	45.5	45.4	45.5	45.6	45.7	15	00	47.8	9 25	43.6	4.2
47.1	46.7	46.2	46.0	45.6	45.7	45.5	45.7	45.7	45.9	15	00	47.7	10 00	44.0	3.7
47.3	46.6	46.1	46.0	45.7	45.8	45.8	45.8	46.0	45.9	14	45	47.8	10 05	43.7	4.1
47.6	47.7	46.7	46.1	45.8	45.8	45.9	45.9	46.0	46.0	17	00	47.7	10 20	44.2	3.5
47.2	46.5	46.0	45.8	45.7	45.7	45.7	45.2	46.1	45.7	15	00	47.8	10 45	41.9	5.9
46.6	45.9	45.9	45.8	45.7	45.7	45.7	46.0	46.3	45.6	14	00	46.7	10 00	43.4	3.3
47.3	46.8	46.2	45.9	45.9	45.9	46.1	46.2	46.3	45.9	15	00	47.4	10 20	43.0	4.4
48.2	46.8	46.2	46.1	45.9	45.8	45.9	46.1	46.2	46.1	15	38	48.3	10 30	44.1	4.2
47.0	46.7	46.6	46.4	46.6	46.2	45.9	46.1	46.5	46.2	15	00	47.2	10 14	43.7	3.5
47.3	47.4	47.1	46.8	46.2	46.2	46.2	46.4	46.6	46.4	6 30		47.8	10 10	43.5	4.3
45.9	46.8	46.8	46.2	45.8	45.6	45.9	45.8	46.1	45.7	5 20		48.0	10 00	43.1	4.9
46.1	47.2	47.2	46.6	46.6	46.7	46.5	46.5	46.4	46.2	17 30		47.3	13 15	44.6	2.7
46.2	46.8	46.6	46.4	46.3	46.2	46.1	46.2	46.3	45.7	17 00		46.8	11 00	43.2	3.6
46.9	46.5	46.0	45.8	45.6	45.5	45.6	45.7	45.8	45.6					4.2	
46.4	46.0	45.8	45.6	45.5	45.5	45.6	45.7	45.8	45.5					3.8	
46.6	46.3	46.0	45.8	45.8	45.9	45.9	46.0	46.0	45.7						

MARCH, 1913.

2° WEST PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1*†	46.6	46.6	46.8	46.7	46.7	46.8	46.9	46.4	45.6	45.0	44.9	44.9	45.1	46.3	47.7
2*†	46.1	46.2	46.5	46.4	46.6	46.2	46.8	46.2	45.4	44.9	44.5	44.7	45.2	46.3	47.0
3*	46.2	46.2	46.2	46.2	46.3	46.2	46.7	45.8	44.9	44.2	44.9	46.0	47.2	47.9	47.9
4	46.5	46.0	45.9	46.1	45.5	45.9	46.9	(46.2)	(45.8)	(45.7)	46.1	46.5	47.3	47.3	47.4
5	46.2	46.3	46.3	46.3	46.5	46.3	46.6	46.3	46.3	46.2	46.2	46.5	47.1	47.7	47.3
6	46.4	46.5	46.3	46.2	46.2	46.2	46.2	45.7	45.3	45.3	46.0	46.7	47.4	47.9	47.4
7	46.5	46.6	46.5	46.4	46.4	46.9	47.3	46.3	45.0	44.2	44.5	45.2	45.7	46.3	46.8
8	46.8	46.5	46.4	46.4	46.3	46.5	46.5	45.4	44.3	44.2	44.5	45.5	46.7	47.2	47.4
9*	47.0	47.2	47.2	47.2	46.6	46.7	46.3	45.7	45.7	46.2	46.3	46.5	47.2	47.3	47.2
10*†	46.5	46.5	46.3	46.1	46.0	45.9	45.9	45.1	44.7	44.9	45.2	45.4	46.3	47.1	47.1
11	46.9	46.5	46.7	46.6	46.5	46.2	45.5	44.2	43.5	44.2	45.2	46.3	47.3	48.5	49.1
12*	46.7	47.0	47.1	46.9	46.6	46.2	46.2	44.6	43.5	42.8	42.9	43.5	45.3	46.9	47.7
13	46.6	46.7	46.7	46.5	46.5	46.3	46.6	46.2	45.3	45.2	45.9	45.9	46.1	46.7	47.9
14	45.8	47.1	46.2	44.9	45.2	44.9	45.8	45.5	45.5	46.3	46.5	46.2	47.0	48.2	48.8
15	46.2	45.9	46.1	45.9	45.8	45.5	46.2	46.9	45.6	45.2	45.2	46.0	46.8	48.0	47.7
16	46.5	46.3	46.3	46.2	46.3	46.2	46.2	46.0	45.6	45.9	45.7	45.9	47.1	48.1	48.2
17	46.4	46.2	46.2	46.9	47.2	45.8	46.1	45.2	45.2	45.2	45.2	45.6	45.9	47.0	46.9
18	47.4	46.5	46.6	46.5	46.3	46.2	45.8	45.5	45.2	45.2	45.3	45.3	45.7	46.3	46.5
19	47.0	47.0	47.1	46.6	47.0	45.8	46.3	46.2	46.2	46.2	46.6	46.6	46.3	46.5	46.3
20*	46.8	46.5	46.4	46.3	46.2	45.6	45.2	45.3	45.5	46.3	47.7	48.2	48.2	49.2	48.6
21	46.4	46.4	46.3	46.0	46.0	45.4	44.5	44.0	44.2	45.1	45.9	46.4	47.0	47.7	48.2
22	46.6	46.9	46.5	46.2	46.0	46.0	45.2	44.9	44.6	45.1	46.0	46.9	47.5	48.4	49.0
23	47.2	47.0	46.4	46.2	45.9	45.2	44.6	44.0	44.2	44.9	45.2	47.2	48.2	48.7	48.6
24*	47.2	47.2	47.2	46.9	46.8	46.3	46.0	44.7	44.2	43.9	44.6	46.2	48.0	48.8	48.6
25*	47.2	47.2	47.0	46.9	46.5	46.1	45.0	44.2	43.2	43.2	44.1	46.2	47.9	49.1	49.2
26†	47.3	47.3	47.0	46.8	46.6	46.4	45.5	44.3	43.5	43.2	43.2	45.2	46.6	47.5	48.1
27*†	47.0	47.0	47.1	47.0	46.8	46.6	46.6	46.3	45.1	44.2	44.2	45.4	47.8	49.2	49.0
28	46.9	47.2	47.2	46.5	47.2	47.1	46.2	45.2	44.4	43.7	43.6	45.0	46.2	46.9	47.3
29	46.4	46.5	46.4	46.8	46.6	46.2	45.6	45.2	45.2	45.6	45.9	47.3	48.5	49.2	48.8
30	46.5	46.2	46.2	46.2	46.1	46.2	45.3	44.7	44.2	45.0	45.4	46.1	46.4	46.8	47.3
31	47.0	46.9	46.3	46.4	46.5	46.4	46.2	46.2	46.1	46.5	47.2	49.0	49.1	49.4	48.9
Mean.....	46.7	46.6	46.6	46.4	46.4	46.1	46.0	45.4	44.9	45.0	45.3	46.1	46.9	47.7	47.9
Mean*.....	46.7	46.8	46.8	46.7	46.5	46.3	46.2	45.4	44.8	44.6	44.9	45.7	46.8	47.8	48.0
Mean†.....	46.7	46.7	46.7	46.6	46.5	46.4	46.3	45.7	44.9	44.4	44.4	45.1	46.2	47.3	47.8

APRIL, 1913.

2° WEST PLUS TABULAR QUANTITIES.

1	46.5	47.0	46.7	46.7	46.6	46.2	44.8	45.0	45.0	45.1	45.5	46.1	47.3	47.9	48.5
2	47.4	47.4	47.2	46.9	46.5	46.2	45.2	44.2	44.2	44.3	45.4	46.7	47.6	48.2	47.8
3*	47.2	47.1	46.8	46.7	46.5	46.5	46.1	44.4	43.2	43.2	45.0	47.6	49.2	49.5	49.3
4	47.2	47.3	47.2	47.0	46.7	46.2	45.2	45.1	45.2	45.5	46.2	47.5	49.1	49.2	48.4
5*	47.3	47.2	47.2	46.6	46.6	46.4	44.8	44.2	44.3	44.5	46.2	48.3	49.5	49.3	49.1
6*†	47.0	46.8	46.5	46.2	46.6	46.2	44.2	44.2	44.1	43.5	43.4	45.3	47.5	48.3	48.2
7*	47.3	47.4	47.2	47.1	46.7	46.2	45.1	45.5	46.1	45.6	46.0	47.1	48.2	48.5	48.6
8	47.3	47.3	47.2	47.2	47.0	46.5	46.2	46.1	46.2	46.2	46.8	48.0	49.6	50.3	50.2
9	46.5	46.6	46.6	46.2	46.0	45.3	44.2	41.5	44.3	45.0	46.9	48.3	50.3	51.7	50.3
10	47.9	48.0	46.6	46.4	46.0	46.4	46.2	46.2	46.4	46.7	47.2	48.0	48.2	48.3	48.6
11	47.3	47.2	47.2	47.0	46.8	46.6	46.4	46.3	46.0	46.1	46.8	47.2	48.3	49.2	49.6
12	47.1	46.4	46.2	46.0	46.2	45.9	45.9	45.2	45.1	45.2	45.6	46.2	47.3	48.2	48.2
13	47.2	46.3	46.8	47.2	46.9	46.3	46.4	47.0	47.2	47.3	47.3	48.2	48.8	49.2	48.6
14	47.2	47.1	46.4	46.5	46.7	46.2	45.4	45.3	45.5	46.2	47.0	48.3	49.9	50.4	50.1
15	46.2	46.1	46.2	46.0	46.6	46.2	45.1	45.0	45.2	44.6	45.1	46.5	48.6	49.7	49.4
16	....	....	....	....	....	....	45.0	45.3	46.2	47.1	47.8	48.8	49.5	49.6	49.2
17	46.6	47.4	46.0	45.7	45.8	45.9	45.5	46.2	46.2	46.7	47.5	49.2	49.3	49.8	49.5
18*	47.5	47.4	47.2	47.0	46.7	46.1	45.2	46.0	46.5	48.0	49.2	50.2	50.8	50.3	49.3
19	47.3	47.2	47.2	47.1	47.0	46.5	45.7	45.2	44.6	45.0	46.5	48.2	49.4	49.8	49.8
20*†	47.5	47.5	47.3	47.2	47.2	47.0	46.3	46.4	46.8	47.4	48.2	49.3	50.1	50.2	49.4
21*†	47.5	47.4	47.2	47.2	46.6	46.2	45.0	44.4	45.1	46.5	47.7	48.8	49.4	49.5	49.6
22*†	47.1	47.0	46.9	46.7	46.5	46.1	45.1	45.1	45.2	46.1	47.0	48.1	49.2	49.8	49.8
23	47.0	47.0	46.9	47.0	46.9	46.3	45.2	44.4	45.0	45.3	45.6	46.0	47.0	48.0	48.9
24*	47.3	47.3	47.1	47.0	46.8	46.5	45.9	46.5	47.5	47.9	48.3	49.1	50.5	50.8	50.1
25*	47.0	47.0	46.8	46.8	46.7	46.6	46.6	47.9	48.1	47.8	47.0	47.4	48.7	49.9	50.6
26†	46.9	46.9	46.9	46.8	46.7	46.7	46.7	47.5	47.9	48.6	48.7	49.3	49.9	50.5	50.2
27	47.3	47.1	47.3	46.8	46.6	45.8	45.2	47.5	48.6	49.8	49.8	49.6	49.6	49.7	49.6
28	47.3	47.5	47.2	47.0	46.7	46.2	46.5	47.2	47.7	48.0	48.5	48.6	48.8	49.3	49.2
29	47.9	47.8	47.7	47.7	47.4	46.8	46.4	47.4	47.7	48.5	48.7	49.4	49.6	49.7	49.3
30	48.0	47.7	47.6	47.5	47.4	47.4	47.6	48.0	48.0	48.4	48.9	49.3	49.5	49.4	49.0
Mean.....	47.2	47.2	46.9	46.8	46.7	46.3	45.7	45.7	46.0	46.3	47.0	48.0	49.0	49.5	49.3
Mean*.....	47.3	47.2	47.0	46.8	46.7	46.4	45.4	45.5	45.7	46.0	46.8	48.1	49.3	49.6	49.4
Mean†.....	47.2	47.1	47.0	46.8	46.7	46.4	45.5	45.5	45.8	46.4	47.0	48.2	49.2	49.7	49.4

* Ten least disturbed days.

† Five international quiet days.

HOURLY VALUES OF DECLINATION.

31

MARCH, 1913.

2° WEST PLUS TABULAR QUANTITIES.

16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean	Maximum		Minimum		Range	Day
										h	m	h	m		
47.6	47.9	47.3	46.8	46.7	46.4	46.3	46.2	46.1	46.4	17	00	47.9	12	00	1
47.2	47.3	47.3	46.8	46.3	46.4	46.2	46.2	46.2	46.2	15	30	47.3	11	05	2
47.9	47.9	47.3	46.9	46.9	46.4	46.3	46.1	46.2	46.4	16	00	47.9	9	35	3
47.8	47.7	47.5	46.9	46.5	46.3	46.2	46.2	46.2	46.5	16	00	47.8	5	00	4
47.1	46.9	47.1	46.8	46.6	46.5	46.6	46.6	46.6	46.6	14	00	47.7	10	00	5
47.3	47.1	47.0	47.2	47.0	46.6	46.2	46.2	46.3	46.5	14	00	47.9	9	40	6
47.1	47.1	47.1	47.0	47.0	46.8	46.7	46.9	46.9	46.4	7	20	47.3	10	15	7
47.3	47.0	47.0	47.2	47.0	46.5	46.6	46.7	46.8	46.4	15	30	47.5	10	00	8
46.7	46.4	46.3	46.4	46.4	46.4	46.2	46.3	46.5	46.6	14	10	47.4	8	40	9
47.1	46.6	46.6	46.4	46.4	46.4	46.5	46.5	46.7	46.2	15	00	47.1	8	59	10
48.3	47.6	46.8	46.2	46.1	46.2	46.3	46.4	46.7	46.4	14	38	49.2	9	00	11
47.9	47.3	46.9	46.6	46.5	46.5	46.4	46.3	46.4	46.0	16	00	47.9	10	00	12
47.8	47.5	47.4	47.0	46.5	46.3	46.3	46.2	46.2	46.5	15	00	47.9	10	00	13
48.6	47.9	47.0	46.9	46.3	46.1	46.3	46.2	46.4	46.5	14	40	49.1	5	48	14
47.1	46.9	46.5	46.6	45.9	45.5	46.2	46.3	47.1	46.3	14	00	48.0	10	30	15
48.2	47.5	45.8	46.3	45.5	46.2	46.2	46.4	46.7	46.5	15	35	48.5	9	35	16
47.3	47.2	47.4	47.2	47.1	47.0	46.9	46.5	46.7	46.4	18	00	47.4	10	55	17
46.4	46.6	46.8	46.8	47.1	47.0	47.1	46.5	46.5	46.3	1	00	47.4	10	00	18
46.2	46.6	46.8	46.8	47.0	47.1	47.0	46.8	46.6	46.6	11	15	47.1	6	00	19
48.3	47.4	47.1	46.9	46.8	46.7	46.4	46.3	46.5	46.8	14	00	49.2	7	34	20
47.9	47.3	47.2	47.2	46.7	46.8	46.2	46.6	46.5	46.3	15	00	48.2	8	12	21
48.4	48.0	47.4	47.2	46.8	45.9	47.1	47.2	47.2	46.7	15	00	49.0	8	50	22
48.2	47.2	47.0	46.9	47.0	46.7	46.8	47.1	47.2	46.6	14	30	49.2	9	30	23
47.5	47.2	46.9	47.0	47.0	46.9	47.0	47.1	47.2	46.7	14	01	48.9	10	00	24
49.5	48.0	47.2	47.2	47.2	47.0	47.0	47.2	47.2	46.7	16	00	49.5	9	40	25
47.2	47.3	47.2	47.1	47.2	46.7	46.5	46.7	47.0	46.3	15	00	48.1	10	00	26
48.3	47.4	47.2	47.2	47.2	47.2	47.2	46.8	46.9	46.9	14	00	49.2	10	50	27
48.2	47.9	47.5	47.2	47.2	46.8	46.6	46.4	46.7	46.5	16	00	48.2	10	30	28
48.3	48.2	47.8	47.6	47.7	47.2	46.9	47.7	46.4	47.0	14	00	49.2	8	00	29
47.5	47.9	47.3	47.6	47.5	47.4	47.4	47.2	47.2	46.5	17	00	47.9	9	00	30
48.2	47.5	47.3	47.1	46.2	46.5	47.1	47.2	47.3	47.2	14	00	49.4	9	00	31
47.7	47.4	47.1	46.9	46.8	46.6	46.6	46.6	46.7	46.5					3.7	
47.8	47.3	47.0	46.8	46.7	46.6	46.6	46.5	46.6	46.5					4.0	
47.5	47.3	47.1	46.9	46.8	46.5	46.4	46.5	46.6	46.4						

APRIL, 1913.

2° WEST PLUS TABULAR QUANTITIES.

16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean	Maximum		Minimum		Range	Day
										h	m	h	m		
48.7	48.1	47.5	47.2	47.2	46.6	46.6	47.2	47.3	46.7	16	00	48.7	9	30	1
47.1	46.9	47.3	47.4	47.3	47.4	47.2	47.3	47.4	46.7	14	00	48.2	9	25	2
49.0	47.7	47.4	47.3	47.4	47.5	47.5	47.4	47.6	47.0	14	00	49.5	9	38	3
47.3	46.3	47.0	47.2	46.3	46.9	47.3	47.4	47.5	46.9	13	40	49.3	7	20	4
48.3	47.5	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.0	13	22	49.8	8	00	5
47.8	47.3	47.2	47.3	47.5	47.6	47.6	47.5	47.4	46.5	14	00	48.3	10	40	6
48.2	47.2	47.2	47.3	47.4	47.3	47.4	47.3	47.2	47.0	15	00	48.6	7	09	7
49.6	48.4	48.2	48.8	48.0	47.7	47.1	47.0	47.1	47.7	14	00	50.3	7	20	8
50.2	48.6	45.5	46.4	47.2	46.5	46.6	47.2	47.3	46.9	14	02	51.9	8	09	9
48.2	47.2	47.2	47.2	47.3	47.2	47.3	47.2	47.5	47.2	15	00	48.6	5	20	10
49.3	48.3	47.8	47.2	47.2	46.7	46.8	47.4	47.2	47.3	15	00	49.6	9	05	11
48.0	47.4	47.0	45.3	47.1	47.2	46.8	47.1	47.2	46.6	15	00	48.2	9	55	12
48.4	47.4	47.3	47.2	47.4	47.3	47.2	47.2	46.4	47.4	14	00	49.2	6	35	13
49.2	48.2	48.0	47.6	47.8	47.5	46.8	46.5	47.0	47.4	14	00	50.4	7	20	14
48.7	48.2	48.1	47.5	46.2	47.4	47.4	47.3	(47.3)	46.9	14	10	50.0	10	10	15
48.4	47.3	47.4	48.0	47.9	48.0	47.8	47.5	47.3	....	13	35	49.9	7	00	16
48.9	48.2	47.5	47.0	47.2	47.3	47.6	47.5	47.5	47.3	14	00	49.8	7	20	17
48.4	48.2	48.3	48.0	47.9	47.9	47.6	47.6	47.8	47.9	13	00	50.8	7	00	18
48.7	48.3	48.2	47.8	47.5	47.6	47.5	47.5	47.5	47.4	15	00	49.8	9	10	19
48.2	47.3	47.3	47.2	47.4	47.5	47.5	47.5	47.6	47.7	14	00	50.2	8	30	20
49.1	48.1	47.3	47.4	47.4	47.5	47.4	47.5	47.3	47.4	14	20	49.7	8	00	21
49.1	48.1	47.7	47.2	47.3	47.4	47.4	47.4	47.4	47.3	14	30	49.9	7	20	22
48.2	47.9	47.7	47.2	47.4	47.6	47.5	47.4	47.4	46.9	15	00	48.9	7	48	23
48.9	47.9	47.7	47.4	47.3	47.3	47.2	47.2	47.2	47.8	14	00	50.8	7	00	24
49.8	48.8	47.9	47.5	47.4	47.1	47.1	46.8	47.1	47.7	14	55	50.6	6	50	25
49.1	48.4	48.3	47.9	47.8	47.8	47.7	47.7	47.6	48.0	14	00	50.5	7	00	26
49.5	48.3	48.6	47.8	48.1	47.7	47.0	47.3	47.3	48.0	10	25	50.0	6	45	27
48.6	48.1	48.8	48.5	48.5	48.4	48.1	47.8	48.2	47.9	14	20	49.5	6	05	28
48.6	48.0	48.6	48.7	48.6	48.4	48.4	48.3	48.3	48.2	14	00	49.7	7	00	29
48.9	48.4	48.6	48.5	48.3	48.3	48.3	48.2	48.2	48.3	13	00	49.5	5	30	30
48.7	47.9	47.7	47.5	47.5	47.4	47.3	47.4	47.4	47.3					4.6	
48.7	47.8	47.5	47.4	47.4	47.4	47.3	47.3	47.3	47.3					5.0	
48.7	47.8	47.6	47.4	47.4	47.4	47.3	47.3	47.3	47.3						

MAY, 1913.

2° WEST PLUS TABULAR QUANTITIES.

Day	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h
1	47.9	47.4	47.2	47.1	46.6	46.3	46.1	47.2	48.4	49.4	49.5	50.0	50.3	50.2	49.6
2	47.8	47.4	47.3	47.1	46.6	46.1	44.8	46.0	47.0	48.2	48.2	48.3	48.5	49.1	49.1
3	48.0	47.8	47.2	47.0	-----	-----	-----	-----	47.3	48.0	48.3	48.9	49.2	49.4	49.4
4	47.9	47.6	47.0	46.9	46.7	46.1	45.1	45.5	48.0	50.6	50.9	51.0	52.0	51.9	52.1
5	46.7	46.9	48.1	46.8	46.0	45.5	44.5	44.8	45.6	47.3	48.5	48.9	49.3	49.4	48.9
6	-----	-----	-----	-----	-----	-----	46.4	47.6	49.0	49.6	49.8	51.2	51.7	51.8	52.0
7	48.9	48.7	48.6	48.6	48.4	48.4	46.7	46.2	46.6	46.9	47.1	47.6	48.7	49.7	49.6
8	48.4	48.0	48.4	48.1	47.9	47.0	47.1	47.7	48.2	48.9	49.0	49.7	50.7	50.9	50.6
9	47.9	47.9	47.9	47.7	47.6	46.7	45.5	45.8	46.5	47.2	48.3	49.0	49.9	49.6	49.6
10	47.9	48.3	48.3	47.9	47.6	46.6	45.6	45.7	46.4	46.8	47.6	48.0	48.8	49.2	49.5
11*	48.3	48.5	48.0	47.8	47.5	46.8	46.4	46.4	46.5	47.2	47.8	48.6	49.3	49.5	49.5
12*	48.1	48.1	47.9	47.6	47.4	46.7	46.3	46.4	47.6	48.3	48.1	48.5	49.4	50.7	51.6
13*	47.9	48.0	48.0	47.7	47.2	46.1	45.6	46.3	47.4	48.2	47.6	48.3	49.3	50.3	50.5
14*	48.2	48.2	48.2	47.7	47.7	47.1	46.9	47.6	49.0	50.1	50.2	49.9	49.6	49.3	48.9
15*	47.8	47.3	47.6	47.5	47.5	46.5	45.3	45.8	46.6	47.5	49.0	50.0	50.1	49.6	49.4
16*	48.7	49.0	48.7	48.5	48.4	48.2	47.3	47.3	48.3	49.3	49.6	50.5	51.1	50.4	49.4
17	48.9	48.8	49.1	48.7	47.8	46.7	45.7	46.0	47.1	48.2	49.2	49.3	49.6	50.0	49.6
18	48.8	48.7	48.4	47.9	47.5	46.0	43.9	43.8	45.1	46.9	48.4	49.6	49.9	49.8	49.9
19	49.0	48.4	48.0	47.8	47.6	46.7	45.7	46.0	48.0	49.4	49.9	50.2	50.3	50.5	49.8
20*	48.7	48.6	48.5	48.4	48.0	46.7	45.5	45.7	46.9	48.8	50.5	51.5	52.2	51.7	50.5
21*	48.7	48.7	48.6	48.5	48.4	47.4	45.8	45.6	46.4	47.5	48.5	49.7	51.0	50.8	50.4
22*	48.6	48.6	48.6	48.5	48.5	47.3	45.4	45.6	47.8	49.5	50.3	51.6	52.7	52.9	52.1
23†	48.4	48.5	48.5	48.4	48.3	48.1	45.2	44.3	45.3	46.7	48.4	50.1	51.5	51.8	51.3
24	48.4	48.3	48.3	48.2	48.0	46.8	45.2	44.6	45.2	46.4	48.1	50.0	51.0	51.1	51.0
25	48.2	48.2	48.3	48.7	48.0	47.0	45.9	45.9	46.8	48.0	48.7	49.6	50.1	50.9	50.6
26*	48.7	48.5	48.6	48.5	48.1	47.0	46.3	47.0	48.0	49.7	50.0	49.9	50.3	50.3	49.9
27	48.5	48.5	48.3	48.2	47.9	46.5	45.5	44.8	47.1	49.8	50.1	50.8	51.0	50.4	49.8
28	48.8	48.8	48.6	48.5	47.8	47.0	46.0	46.0	47.7	49.7	49.7	49.9	49.6	50.2	49.8
29	48.5	48.4	48.4	48.3	47.7	46.5	45.7	47.4	49.7	51.1	50.9	50.2	49.2	49.2	49.2
30	48.4	48.5	48.3	48.2	47.5	46.4	45.9	47.4	49.3	49.6	49.9	50.2	50.1	50.1	49.4
31	48.2	48.2	48.1	48.1	47.6	46.3	46.0	47.3	49.7	50.2	49.5	48.5	48.3	49.2	49.6
Mean.....	48.4	48.3	48.2	48.1	47.7	46.8	45.8	46.1	47.4	48.6	49.1	49.7	50.2	50.4	50.1
Mean*.....	48.4	48.4	48.3	48.1	47.9	47.0	46.1	46.4	47.4	48.6	49.2	49.8	50.5	50.6	50.2
Mean†.....	48.5	48.5	48.5	48.3	48.2	47.3	45.8	45.8	47.1	48.5	49.6	50.6	51.4	51.3	50.6

JUNE, 1913.

2° WEST PLUS TABULAR QUANTITIES.

1	48.7	48.2	48.8	47.5	47.1	45.8	44.7	45.0	46.8	48.9	50.0	50.3	50.1	50.9	51.8
2	48.7	49.3	48.9	48.3	48.8	46.8	45.7	45.8	46.8	47.5	47.9	48.7	49.4	50.4	50.6
3	48.6	48.2	49.5	48.5	47.8	46.6	45.9	46.1	46.7	47.9	49.3	51.2	52.2	52.7	52.4
4	48.8	48.7	49.2	48.9	48.1	46.3	45.3	45.0	46.0	47.3	49.1	50.3	50.5	50.6	50.9
5	48.7	48.6	48.7	48.5	48.1	46.4	44.7	45.0	47.2	49.3	49.1	49.3	50.2	50.5	50.3
6*	49.1	49.2	49.1	49.1	49.0	47.8	45.1	44.3	46.0	47.4	49.0	50.5	51.2	51.5	52.0
7*†	48.9	48.7	48.7	48.6	48.2	47.1	45.6	44.9	46.0	47.4	48.9	50.2	50.6	50.5	50.7
8*†	48.8	48.8	48.4	48.2	47.8	46.8	45.1	44.9	46.1	47.2	49.1	50.1	50.5	50.8	50.7
9*	48.6	48.6	48.6	48.4	48.4	47.2	45.9	46.6	47.7	48.1	48.7	49.3	49.6	49.7	49.7
10	48.1	48.2	48.5	48.3	48.2	46.8	46.1	46.3	46.9	48.2	48.7	49.7	50.6	50.6	50.2
11†	48.6	48.5	48.5	48.6	48.6	47.9	47.5	47.5	48.6	49.7	50.4	50.6	50.2	50.5	50.4
12*†	49.2	49.1	48.9	48.7	48.7	48.2	47.5	47.6	48.6	49.2	48.5	49.8	50.3	49.8	49.5
13	49.3	49.3	49.0	48.9	48.5	47.9	46.5	46.4	48.3	49.4	49.6	49.9	50.3	50.7	51.1
14	48.9	48.6	48.4	48.4	48.4	47.4	47.1	47.6	48.6	49.3	50.0	49.8	49.7	49.2	49.2
15	49.1	49.1	49.1	49.0	48.9	47.7	46.8	46.8	48.2	49.4	50.1	51.0	51.2	51.2	51.1
16	49.5	49.6	49.4	50.0	49.0	48.0	46.7	46.3	47.6	48.8	49.4	50.2	50.9	51.0	50.2
17*	49.3	49.1	49.0	49.0	48.4	47.5	46.7	47.4	49.8	50.6	52.0	52.0	51.9	51.6	51.0
18*	49.1	49.2	49.0	49.0	48.7	47.5	46.0	46.0	48.0	49.3	50.3	50.2	50.5	50.4	50.4
19	49.1	49.1	49.0	48.9	48.7	47.4	46.6	47.0	48.4	49.5	50.0	50.9	51.0	51.9	52.0
20*	49.1	49.2	49.0	49.0	48.4	47.3	47.1	48.1	48.8	49.0	49.8	50.9	51.3	51.3	51.1
21	50.0	49.8	49.9	49.7	49.0	47.4	45.5	45.0	46.1	47.7	49.3	50.3	51.6	52.5	52.5
22*	49.2	49.3	49.3	49.1	49.0	47.9	46.7	47.0	48.2	49.0	49.3	49.7	50.6	51.3	52.3
23	49.3	49.1	49.0	48.8	48.3	47.8	46.6	46.0	45.1	46.0	47.2	48.7	49.4	50.0	50.5
24	49.3	49.5	49.1	49.6	48.9	48.2	47.8	47.1	47.1	47.9	48.8	49.5	50.0	50.3	50.0
25*	49.2	49.1	49.0	48.9	48.9	48.5	47.9	47.1	47.8	49.8	51.0	52.0	52.2	52.0	50.9
26	49.5	49.8	49.1	49.2	49.0	48.0	46.8	46.7	46.8	47.7	48.2	49.0	49.6	50.3	50.6
27†	49.5	49.5	49.5	49.3	49.1	48.2	47.1	47.1	47.9	49.0	49.6	50.1	50.1	50.2	50.2
28	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
29	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
30	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Mean.....	49.0	49.0	49.0	48.8	48.5	47.4	46.3	46.3	47.4	48.5	49.4	49.8	51.0	50.8	50.8
Mean*.....	49.0	49.0	48.9	48.8	48.6	47.6	46.4	46.4	47.7	48.7	49.7	50.5	50.9	50.9	50.8
Mean†.....	49.0	48.9	48.8	48.7	48.5	47.6	46.6	46.4	47.4	48.5	49.3	50.2	50.3	50.4	50.3

*Ten least disturbed days.

† Five international quiet days.

HOURLY VALUES OF DECLINATION.

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MAY, 1913.

2° WEST PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum		Minimum		Range	Day
										<i>h</i>	<i>m</i>	<i>h</i>	<i>m</i>		
49.1	48.5	48.9	48.6	48.6	48.5	48.4	48.3	48.2	48.3	13	30	50.4	6 40	45.6	1
48.8	....	....	....	....	49.2	49.1	48.8	48.4	....	14	30	49.2	7 00	44.8	2
48.8	47.5	48.0	48.3	48.4	48.6	48.4	48.7	48.3	....	14	00	49.4	...	....	3
50.4	49.0	48.6	48.1	47.9	48.1	45.2	46.3	46.1	48.3	13	25	52.5	22 09	44.8	4
48.1	48.0	48.9	47.9	....	....	....	....	....	....	14	00	49.4	7 22	43.9	5
52.8	52.1	51.7	50.8	50.6	50.4	49.5	49.1	48.9	....	16	00	52.8	7 15	46.2	6
49.1	48.9	49.0	47.4	48.7	48.7	48.1	48.4	48.4	48.2	14	00	49.7	8 00	46.2	7
50.1	49.0	48.8	48.6	48.4	48.0	48.2	47.8	48.1	48.6	14	00	50.9	6 20	46.9	8
49.0	48.1	48.2	47.7	47.7	47.9	47.7	47.8	48.3	47.9	12	50	49.9	7 00	45.5	9
49.2	47.8	47.7	47.9	47.8	47.9	47.9	48.2	48.3	47.8	15	12	49.6	7 30	45.4	10
49.6	48.8	48.5	48.5	48.4	48.1	48.1	48.2	48.2	48.1	16	00	49.6	8 00	46.4	11
51.5	50.4	49.4	49.0	48.6	48.5	48.3	48.1	47.6	48.5	15	30	51.9	7 40	46.1	12
50.2	49.5	49.2	48.6	48.5	48.3	48.3	48.3	48.3	48.2	15	00	50.5	6 55	45.4	13
48.6	48.4	49.0	48.9	49.0	49.0	49.0	48.4	48.2	48.6	11	00	50.2	6 15	46.7	14
48.5	48.4	48.4	48.4	48.6	48.7	48.7	48.8	48.9	48.1	12	55	50.2	7 26	45.2	15
48.8	48.2	48.5	48.6	48.7	48.7	48.7	48.9	48.5	48.8	13	00	51.1	7 08	47.2	16
49.1	48.0	48.5	48.1	48.2	48.3	48.3	48.1	48.4	48.3	13	50	50.0	7 15	45.4	17
49.6	48.5	48.5	48.5	48.6	48.8	48.4	48.7	48.5	48.0	14	25	50.0	7 14	43.0	18
49.1	47.9	48.4	48.7	48.7	48.7	48.7	48.6	48.8	48.5	14	00	50.5	7 19	45.6	19
49.7	48.9	48.8	48.6	48.8	48.9	48.8	48.8	48.9	48.8	13	00	52.2	7 15	45.3	20
49.6	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.6	13	30	51.1	7 20	45.5	21
50.3	48.3	48.0	48.1	48.2	48.3	48.2	48.2	48.3	48.9	14	00	52.9	7 25	45.0	22
50.3	49.3	49.1	49.0	49.0	48.7	48.6	48.6	48.5	48.6	13	36	52.2	7 55	44.2	23
50.2	49.0	48.9	48.5	48.7	48.3	48.1	48.1	48.4	48.3	14	00	51.1	7 52	44.5	24
50.0	49.0	49.0	48.8	48.8	48.9	48.8	48.8	48.8	48.6	14	00	50.9	7 27	45.4	25
49.4	48.2	48.7	48.9	48.9	48.8	48.8	48.7	48.7	48.7	13	35	50.5	7 00	46.3	26
49.4	48.9	49.0	49.1	49.0	49.1	49.0	49.0	48.9	48.7	13	00	51.0	8 00	44.8	27
49.6	49.0	49.0	48.8	48.8	48.8	48.7	48.6	48.6	48.7	14	00	50.2	7 37	45.3	28
49.2	49.2	49.4	49.1	49.1	49.1	48.7	48.6	48.6	48.8	10	00	51.1	6 50	45.4	29
49.2	48.8	49.2	49.2	48.9	48.9	48.6	48.5	48.3	48.7	14	10	50.2	6 48	45.6	30
49.3	49.1	49.1	49.2	49.1	48.9	49.0	49.0	49.0	48.6	10	00	50.2	6 40	45.6	31
49.6	48.7	48.7	48.6	48.6	48.6	48.4	48.4	48.4	48.5					5.3	
49.6	48.8	48.7	48.6	48.6	48.6	48.6	48.5	48.4	48.5					5.1	
49.7	48.7	48.7	48.7	48.6	48.6	48.5	48.5	48.6	48.7						

JUNE, 1913.

2° WEST PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum		Minimum		Range	Day
										<i>h</i>	<i>m</i>	<i>h</i>	<i>m</i>		
51.4	50.0	50.2	49.8	49.5	48.1	47.5	48.0	48.2	48.6	15	00	51.8	6 38	44.0	1
50.6	49.8	49.4	49.1	49.0	48.8	48.9	48.6	49.2	48.6	15	32	50.7	7 41	45.1	2
51.2	49.8	49.6	49.4	49.4	49.3	48.9	48.4	48.9	49.1	14	14	53.0	7 32	45.4	3
50.6	49.4	49.7	49.2	48.4	49.0	48.9	48.7	49.0	48.7	15	00	50.9	7 41	44.0	4
50.1	49.6	49.7	49.3	49.3	49.3	49.3	49.2	49.2	48.7	14	00	50.5	7 30	44.3	5
51.9	50.2	49.5	49.1	49.0	49.0	49.0	49.0	49.0	49.0	15	00	52.0	7 42	44.2	6
50.6	49.8	49.4	49.1	49.0	48.9	48.9	48.9	48.9	48.7	15	00	50.7	7 40	44.8	7
50.2	49.8	49.8	49.3	49.0	49.0	48.7	48.7	48.7	48.6	14	20	50.8	7 43	44.8	8
49.7	49.7	49.7	48.8	48.7	48.5	48.4	48.1	48.2	48.5	13	40	49.8	7 20	45.9	9
49.7	49.3	49.6	49.6	49.6	49.6	49.4	49.0	48.8	48.8	13	00	50.6	7 30	46.0	10
50.5	50.5	50.6	50.5	50.3	50.1	49.8	49.6	49.5	49.5	12	00	50.6	7 50	46.9	11
49.7	49.9	50.4	50.2	49.9	49.7	49.6	49.5	49.4	49.2	18	00	50.4	7 00	47.5	12
51.0	51.2	51.0	50.6	50.4	50.3	49.5	49.5	49.3	49.5	17	00	51.2	7 30	46.2	13
49.2	49.3	50.2	50.2	50.2	50.0	49.5	49.4	49.4	49.1	19	50	50.3	7 00	47.1	14
50.8	50.1	50.2	50.2	50.1	50.1	50.0	50.0	49.8	49.6	13	35	51.4	7 07	46.7	15
50.3	50.2	50.6	50.2	50.0	49.8	49.7	49.7	49.4	49.4	14	00	51.0	7 30	46.1	16
49.9	49.0	49.0	49.1	49.1	49.2	49.1	49.0	49.1	49.5	11	30	52.1	7 00	46.7	17
50.1	50.0	50.0	49.6	49.4	49.3	49.2	49.1	49.1	49.1	13	42	50.6	7 27	45.6	18
51.2	50.0	49.9	50.0	50.0	49.9	49.4	49.7	49.1	49.5	14	17	52.0	7 20	46.2	19
51.2	51.1	50.8	50.1	50.0	49.7	49.6	49.7	49.8	49.6	13	30	51.5	7 00	47.1	20
51.8	50.7	50.1	50.1	50.0	49.5	49.3	49.1	49.1	49.4	15	00	52.5	7 57	44.9	21
52.2	51.6	50.8	49.9	49.7	49.5	49.5	49.2	49.0	49.6	15	12	52.6	7 48	46.5	22
50.3	50.0	50.0	50.3	49.9	49.9	49.7	49.5	49.5	48.8	14	55	50.6	9 00	45.1	23
49.5	49.7	50.1	50.1	50.0	49.9	49.5	49.4	49.2	49.2	14	00	50.3	7 49	46.7	24
50.0	49.3	50.0	50.1	50.0	50.0	49.9	49.7	49.5	49.7	13	00	52.2	8 10	47.0	25
50.5	50.6	50.5	50.3	50.1	50.0	49.4	49.3	49.2	49.2	15	00	50.6	7 55	46.2	26
50.0	49.0	49.5	50.0	50.1	50.0	50.0	50.0	50.0	49.4	14	00	50.2	7 42	46.7	27
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	28
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	29
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	30
50.5	50.0	50.0	49.8	49.6	49.5	49.3	49.2	49.2	49.1					5.3	
50.6	50.0	49.9	49.5	49.4	49.3	49.2	49.1	49.1	49.2					5.3	
50.2	49.8	49.9	49.8	49.6	49.5	49.3	49.2	49.1	49.1						

JULY, 1913.

2° WEST PLUS TABULAR QUANTITIES.

Day	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h
1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
14	----	----	----	----	----	----	----	----	----	----	----	49.7	51.9	52.9	52.7
15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
16*	50.7	50.4	50.4	50.5	50.7	49.0	47.0	46.0	46.8	47.7	47.7	50.0	51.6	53.0	53.6
17*†	50.8	50.6	50.4	50.1	49.8	49.0	47.9	47.5	47.4	47.7	49.0	50.0	50.9	51.7	51.5
18*	50.7	50.7	50.7	50.2	49.9	49.1	46.9	46.8	46.7	48.1	49.7	50.7	51.7	52.2	52.0
19*†	50.8	50.7	50.7	50.6	49.9	49.1	47.4	46.6	47.8	49.1	50.6	51.7	52.1	52.6	51.6
20	50.7	50.7	50.6	49.7	48.8	48.0	47.7	48.7	49.7	51.7	52.8	52.7	52.9	52.5	51.7
21	50.0	50.6	50.2	50.1	49.7	47.9	47.4	46.9	46.7	47.0	----	----	----	----	----
22*	50.8	50.7	50.5	50.3	49.8	49.6	48.8	47.8	47.7	47.8	49.5	50.6	50.8	51.5	51.8
23*	50.6	50.6	50.6	50.6	49.9	49.8	48.2	48.2	48.1	48.1	48.9	49.9	50.3	50.4	50.6
24	50.3	50.7	50.7	50.5	50.6	49.8	48.8	48.7	48.6	49.7	50.5	50.3	50.0	50.7	50.7
25	49.9	49.9	50.1	49.7	49.5	47.7	47.1	47.7	47.8	49.1	50.7	50.9	51.1	51.0	51.7
26	50.1	50.0	50.0	50.0	49.8	48.4	47.3	47.2	48.2	49.8	50.9	51.8	52.4	52.9	53.0
27*	50.7	50.0	50.0	50.0	49.7	49.0	47.9	47.7	47.8	48.7	49.0	48.9	49.6	50.7	51.7
28*†	50.4	50.3	50.1	49.9	49.7	48.8	48.2	48.7	48.9	49.7	49.8	50.7	51.7	52.0	52.0
29	49.9	49.8	49.7	49.6	49.7	48.8	47.9	48.0	49.7	50.6	51.2	51.5	51.4	50.6	51.3
30*	50.3	50.1	49.9	49.7	49.5	48.6	46.6	45.8	47.1	49.7	50.8	51.8	52.5	52.7	51.9
31*	50.7	50.1	49.8	49.7	49.1	47.7	46.5	47.1	48.8	50.4	51.3	51.9	52.6	52.8	52.2
Mean.....	50.5	50.4	50.3	50.1	49.8	48.8	47.6	47.4	48.1	49.2	50.2	50.9	51.4	51.8	51.8
Mean*.....	50.6	50.4	50.3	50.2	49.8	49.0	47.5	47.1	47.7	48.7	49.6	50.6	51.4	52.0	51.9
Mean†.....	50.7	50.5	50.4	50.2	49.8	49.0	47.8	47.6	48.0	48.8	49.8	50.8	51.6	52.1	51.7

AUGUST, 1913.

2° WEST PLUS TABULAR QUANTITIES.

1*†	50.5	50.4	50.0	49.9	49.8	48.9	47.9	47.1	48.2	49.8	50.4	51.2	51.9	52.9	53.4
2*	50.6	50.4	50.0	49.9	49.4	48.9	47.9	47.7	49.2	51.1	52.0	52.7	52.9	53.6	54.1
3*	50.7	50.5	50.0	49.9	49.6	48.4	46.7	46.0	47.1	48.7	50.0	52.1	53.2	53.9	53.0
4	50.8	50.6	50.2	50.1	49.8	47.9	46.0	47.0	48.3	49.0	48.9	49.8	50.3	51.5	51.3
5*†	50.9	50.9	50.8	50.3	50.0	48.9	46.9	47.1	48.1	49.9	50.9	51.9	53.0	53.2	52.9
6	50.9	50.9	51.1	51.0	50.4	49.7	47.9	47.7	48.1	49.0	50.1	51.3	52.0	53.0	53.1
7	50.9	50.9	50.9	50.8	50.2	49.9	48.1	46.1	45.9	47.8	48.3	50.0	51.2	51.9	52.9
8	50.8	50.6	50.7	50.7	50.4	50.0	49.3	48.9	49.3	50.6	51.8	52.2	52.2	52.9	52.9
9	50.7	50.5	50.1	49.9	49.9	49.9	48.9	48.9	49.9	50.4	51.0	51.3	51.7	51.5	50.9
10	50.9	50.6	50.9	50.2	50.1	48.6	46.7	48.9	50.2	51.9	51.7	51.2	51.8	50.9	50.2
11	50.9	51.9	51.4	50.8	49.9	48.8	45.0	47.9	48.9	50.4	51.0	51.1	51.8	51.1	51.0
12	51.0	50.8	50.5	50.4	50.3	49.6	48.0	47.9	49.4	49.2	50.6	50.9	51.1	51.6	51.5
13	50.0	50.5	49.9	50.3	49.9	48.5	46.9	47.2	48.5	49.4	50.9	51.0	51.4	51.9	51.6
14	51.0	51.0	50.9	50.9	50.0	48.9	47.0	47.2	48.9	50.9	52.9	53.9	54.0	53.9	53.0
15	51.0	50.9	50.8	50.1	49.5	48.3	46.5	46.9	48.8	50.6	51.4	52.0	52.4	52.9	52.8
16	50.9	52.1	50.2	49.6	49.7	48.8	46.0	46.8	48.8	50.8	52.2	53.2	53.9	53.0	52.2
17	51.0	51.1	50.9	51.2	49.9	48.8	46.9	47.3	48.9	50.0	50.9	51.1	50.9	51.5	51.2
18	51.1	51.0	50.9	50.9	50.9	48.9	46.4	47.2	49.8	51.4	51.9	52.1	52.9	52.9	52.0
19*	51.7	51.4	50.9	50.7	50.1	48.9	46.9	47.0	47.9	48.9	50.0	51.1	52.7	53.7	53.4
20*†	51.0	50.9	50.9	50.6	50.1	49.8	48.4	47.6	47.6	48.8	49.2	50.9	52.5	53.8	54.0
21*	50.9	50.9	50.8	50.4	49.9	49.0	47.2	46.2	48.1	50.4	52.1	53.4	53.6	53.0	52.9
22*	50.9	50.9	50.8	50.0	49.8	48.6	46.0	46.2	47.6	49.3	51.1	52.3	52.9	53.2	53.0
23	51.0	50.9	50.6	49.9	49.1	47.8	48.9	46.7	47.9	49.6	50.9	51.8	51.9	52.6	52.7
24	51.0	50.9	50.6	50.4	49.9	48.9	46.8	47.0	49.0	50.5	51.8	52.1	53.0	53.4	53.3
25	51.1	51.0	50.9	50.7	50.0	48.9	47.6	47.9	49.6	50.6	51.4	53.1	54.2	54.1	53.9
26	50.9	50.9	50.8	50.7	50.1	49.8	47.9	46.6	46.9	48.7	49.9	50.6	52.2	53.1	53.6
27	51.0	51.0	50.9	50.8	50.5	49.7	48.0	48.9	50.0	51.2	52.0	52.6	52.4	52.0	51.9
28	51.0	51.0	50.9	50.8	50.5	49.7	48.7	49.9	52.0	53.1	54.0	54.5	53.9	53.0	52.2
29*†	51.2	51.0	50.9	50.6	50.1	49.0	47.4	49.2	51.1	52.8	53.1	53.3	52.9	52.0	51.8
30*†	51.2	51.0	50.9	50.7	50.1	48.9	47.1	49.5	51.5	52.5	53.0	52.9	52.9	52.5	52.1
31	51.0	50.9	50.8	50.3	50.0	49.2	47.4	49.0	51.2	52.8	53.0	53.1	53.1	52.5	51.9
Mean.....	50.9	50.9	50.7	50.4	50.0	49.0	47.2	47.6	48.9	50.3	51.2	52.0	52.5	52.7	52.5
Mean*.....	51.0	50.8	50.6	50.3	49.9	48.9	47.2	47.4	48.6	50.2	51.2	52.2	52.8	53.2	53.1
Mean†.....	51.0	50.8	50.7	50.4	50.0	49.1	47.5	48.1	49.3	50.8	51.3	52.0	52.6	52.9	52.8

* Ten least disturbed days.

† Five international quiet days. July 4 and 9 missing.

JULY, 1913.

2° WEST PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum		Minimum		Range	Day
'	'	'	'	'	'	'	'	'	'	<i>h</i>	<i>m</i>	'	'	'	
....	....	....	....	....	....	....	....	....	....	..	..	..	..	..	1
....	....	....	....	....	....	....	....	....	....	..	..	..	..	..	2
....	....	....	....	....	....	....	....	....	....	..	..	..	..	..	3
....	....	....	....	....	....	....	....	....	....	..	..	..	..	..	4
....	....	....	....	....	....	....	....	....	....	..	..	..	..	..	5
....	....	....	....	....	....	....	....	....	....	..	..	..	..	..	6
....	....	....	....	....	....	....	....	....	....	..	..	..	..	..	7
....	....	....	....	....	....	....	....	....	....	..	..	..	..	..	8
....	....	....	....	....	....	....	....	....	....	..	..	..	..	..	9
....	....	....	....	....	....	....	....	....	....	..	..	..	..	..	10
....	....	....	....	....	....	....	....	....	....	..	..	..	..	..	11
....	....	....	....	....	....	....	....	....	....	..	..	..	..	..	12
....	....	....	....	....	....	....	....	....	....	..	..	..	..	..	13
....	....	....	....	....	....	....	....	....	....	..	..	..	..	..	14
52.0	51.2	51.0	51.0	50.8	50.6	50.7	50.6	50.6	50.6	14	00	52.9	..	..	15
52.7	51.8	51.2	50.8	50.7	50.7	50.7	50.6	50.6	50.2	15	00	53.6	7 50	45.8	16
51.1	51.2	50.9	50.7	50.7	50.6	50.6	50.6	50.7	50.1	14	00	51.7	9 00	47.4	17
51.5	50.6	50.2	50.4	50.2	50.6	50.7	50.7	50.7	50.0	14	00	52.2	8 00	45.8	18
50.8	50.6	50.7	50.5	50.4	50.4	50.4	50.2	50.2	50.2	13	40	52.7	8 00	46.6	19
51.0	50.7	50.8	51.0	50.7	50.7	49.8	49.9	50.6	50.6	12	50	53.0	6 27	46.7	20
....	50.7	50.6	50.8	50.8	50.8	50.7	50.7	50.7	....	..	..	..	9 00	46.7	1
51.7	51.4	51.0	51.0	50.7	50.1	50.3	49.8	50.4	50.2	15	00	51.8	8 27	47.4	22
50.7	50.7	50.8	50.9	50.9	50.8	50.7	50.7	50.5	50.1	20	00	50.9	7 35	48.0	23
50.8	50.8	50.8	50.6	50.8	50.7	50.7	50.4	50.0	50.3	2	20	51.7	8 25	48.2	24
52.0	51.9	52.0	51.3	50.8	50.8	50.6	50.4	50.4	50.2	16	00	52.0	7 10	46.7	25
52.9	52.0	51.5	50.8	50.8	50.4	49.9	49.9	49.9	50.4	15	41	53.3	7 45	46.8	26
51.6	51.2	51.2	50.7	50.7	50.7	50.7	50.6	50.5	50.0	15	00	51.7	7 30	47.4	27
51.8	51.3	50.8	51.0	50.8	50.8	50.7	50.2	50.9	50.4	14	30	52.4	7 15	47.8	28
51.7	51.7	51.7	51.3	51.4	51.1	50.8	50.7	50.5	50.4	16	00	51.7	7 30	47.8	29
51.0	50.6	50.5	50.7	50.6	50.7	50.8	50.7	50.7	50.1	14	00	52.7	8 00	45.8	30
51.6	50.9	50.8	50.8	50.8	50.8	50.7	50.5	50.6	50.3	13	50	52.8	7 00	46.5	31
51.5	51.2	51.0	50.8	50.7	50.7	50.5	50.4	50.5	50.2					5.3	
51.4	51.0	50.8	50.8	50.6	50.6	50.6	50.5	50.6	50.2					5.4	
51.2	51.0	50.8	50.7	50.5	50.7	50.7	50.6	50.6	50.2						

AUGUST, 1913.

2° WEST PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum		Minimum		Range	Day
'	'	'	'	'	'	'	'	'	'	<i>h</i>	<i>m</i>	'	'	'	
53.0	51.2	50.7	50.9	50.9	50.9	50.8	50.7	50.6	50.5	15	06	53.4	7 50	47.0	1
53.3	52.0	51.8	51.9	51.4	51.2	50.9	50.4	50.4	51.0	15	00	54.1	7 40	47.5	2
52.0	50.7	50.5	50.9	50.9	50.9	50.9	50.9	50.9	50.4	14	00	53.9	7 50	45.9	3
51.1	51.1	51.1	51.0	50.9	50.9	50.8	50.8	50.7	50.0	14	22	51.8	7 02	46.0	4
52.0	51.1	50.9	51.0	51.0	50.9	50.9	50.9	50.9	50.6	13	20	53.2	7 20	46.7	5
52.4	52.1	51.5	51.0	50.9	50.9	50.9	50.9	50.9	50.7	14	13	53.2	7 30	47.1	6
52.9	52.1	51.8	51.1	50.9	50.9	50.9	50.8	50.7	50.3	16	00	52.9	8 35	45.7	7
52.6	52.0	51.9	51.6	51.2	50.9	50.9	50.9	50.7	51.1	14	15	53.0	7 42	48.6	8
50.8	50.5	50.9	50.8	50.0	50.6	50.9	50.9	50.9	50.5	12	50	51.8	7 15	48.4	9
50.6	50.2	50.9	51.1	51.0	51.0	50.9	50.9	50.9	50.5	10	20	52.0	7 40	46.3	10
51.4	51.3	51.8	51.5	51.3	50.9	51.0	50.8	51.0	50.5	2	30	52.4	..	59	11
51.9	51.9	51.3	51.5	51.5	51.2	51.1	50.6	49.9	50.6	0	31	52.0	7 30	47.5	12
51.2	50.9	50.9	51.0	51.0	51.1	51.0	51.2	51.1	50.3	14	00	51.9	7 20	46.8	13
52.8	52.1	51.0	51.0	51.2	51.2	51.1	51.1	51.0	51.1	12	58	54.1	7 20	46.9	14
52.1	51.9	51.2	51.0	51.0	51.0	50.9	50.9	51.0	50.7	14	00	52.9	7 36	46.0	15
51.4	51.4	51.7	51.1	51.0	51.0	51.0	51.1	51.1	50.8	12	57	53.9	7 28	45.8	16
51.6	51.5	51.4	51.2	51.2	51.0	50.1	50.9	51.1	50.5	16	00	51.6	7 24	46.6	17
51.1	50.8	50.9	51.1	51.0	51.1	51.1	51.1	51.0	50.8	13	00	52.9	7 15	46.1	18
52.9	52.0	51.4	51.0	51.1	51.1	51.1	51.1	51.0	50.8	14	00	53.7	7 22	46.7	19
53.6	52.9	51.9	51.3	51.2	51.1	51.0	51.0	50.9	50.9	15	00	54.0	8 15	47.3	20
51.9	51.4	51.3	51.4	51.5	51.2	51.2	51.1	51.0	50.9	12	52	53.8	7 54	46.1	21
52.7	51.9	51.6	51.7	51.6	51.6	51.4	51.2	51.2	50.7	13	40	53.4	7 30	45.9	22
52.9	51.9	51.9	51.9	51.1	51.7	51.3	51.2	51.3	50.6	16	00	52.9	7 20	45.3	23
52.8	51.9	51.5	51.6	51.6	51.6	51.5	51.5	51.3	51.0	14	25	53.6	7 28	46.4	24
52.9	52.4	51.8	51.7	51.7	51.3	51.4	51.0	50.9	51.3	13	25	54.4	7 21	46.7	25
53.0	52.8	52.0	51.7	51.6	51.7	51.5	51.1	51.2	50.8	15	00	53.6	8 22	46.3	26
51.3	51.4	51.9	51.8	51.7	51.6	51.5	51.3	51.1	51.1	12	23	52.6	7 07	48.0	27
51.9	51.7	51.9	51.7	51.6	51.6	51.5	51.5	51.4	51.7	12	00	54.5	7 08	48.4	28
51.6	51.8	51.9	51.9	51.9	51.6	51.6	51.2	51.4	51.3	12	09	53.4	7 00	47.4	29
52.2	51.9	51.9	51.8	51.8	51.7	51.5	51.5	51.3	51.4	11	00	53.0	7 00	47.1	30
51.0	50.8	51.2	51.6	51.6	51.7	51.7	51.6	51.4	51.2	12	25	53.3	7 00	47.4	31
52.1	51.6	51.4	51.3	51.2	51.2	51.1	51.0	51.0	50.8					6.4	
52.5	51.7	51.4	51.4	51.3	51.2	51.1	51.0	51.0	50.8					6.8	
52.5	51.8	51.5	51.4	51.3	51.2	51.1	51.0	51.0	50.9						

SEPTEMBER, 1913.

2° WEST PLUS TABULAR QUANTITIES.

Day	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h
1	51.4	51.1	50.7	50.7	49.9	48.0	46.6	48.2	50.3	51.1	52.5	54.5	54.9	54.1	53.2
2	51.9	51.6	51.1	51.0	50.2	48.2	45.3	46.5	49.2	52.0	53.6	54.8	55.0	55.0	55.1
3*	51.2	51.5	51.2	51.0	51.0	49.0	46.9	46.8	48.0	49.8	51.1	52.4	53.0	54.0	53.7
4*†	52.0	52.0	51.9	51.7	51.0	50.1	48.0	46.2	46.8	49.0	51.9	53.8	53.5	55.0	55.0
5	51.7	51.7	51.5	51.2	51.0	50.0	47.9	46.7	46.6	48.3	50.6	52.1	53.0	53.1	53.1
6	51.5	51.5	51.3	51.1	51.8	51.0	49.0	48.0	48.0	49.8	51.0	52.1	53.1	53.6	53.6
7	52.2	52.0	52.3	52.0	51.7	50.1	49.0	49.1	50.1	52.1	53.7	54.0	54.1	53.6	52.8
8	51.5	51.3	52.2	50.4	52.0	49.8	49.8	50.3	51.1	52.9	54.1	54.4	54.2	53.5	53.2
9	51.1	51.0	51.5	50.6	50.4	51.4	49.2	51.1	51.0	51.0	52.2	53.7	54.2	53.8	53.1
10	52.8	52.0	51.3	51.6	51.2	50.7	50.1	50.9	51.5	52.1	52.9	53.1	53.0	53.0	52.2
11	51.8	52.8	53.0	52.0	51.2	50.2	49.1	49.6	51.1	53.0	54.1	54.2	54.0	53.5	52.7
12	52.2	52.0	51.3	51.1	51.0	50.7	49.1	49.4	50.4	52.4	54.0	54.5	54.5	53.8	52.9
13	51.9	52.0	52.0	51.9	51.1	50.4	49.1	49.0	49.6	51.1	53.2	55.0	55.4	54.7	53.2
14	(52.0)	(51.9)	(51.7)	(51.5)	(51.3)	(50.8)	(49.6)	(49.1)	(51.4)	52.4	51.9	54.9	54.9	54.2	53.0
15†	52.9	52.3	51.7	51.1	51.0	50.0	48.5	48.2	49.7	51.3	52.1	54.1	54.1	53.6	52.2
16*	52.1	52.0	52.6	51.6	51.0	50.1	49.0	48.9	50.1	51.6	52.9	53.9	54.0	53.0	52.1
17*	52.2	52.0	52.0	51.4	51.0	50.5	49.3	48.8	48.9	50.2	52.1	53.7	54.1	53.7	53.0
18	52.0	52.0	51.8	51.5	51.2	50.9	49.1	48.1	48.1	49.6	51.3	53.2	54.9	55.2	54.9
19	51.8	51.4	52.0	51.8	51.2	51.0	49.1	47.8	47.2	48.8	50.1	50.6	53.1	54.0	54.1
20*†	52.1	52.1	52.0	51.9	51.5	51.2	50.7	49.3	49.0	49.4	50.9	52.2	53.1	53.3	53.3
21*	52.0	52.0	51.9	51.5	51.2	51.0	50.4	50.2	50.2	50.9	51.4	52.1	52.5	53.1	53.6
22	52.0	52.0	51.8	51.6	51.7	52.0	52.2	51.7	51.3	52.1	52.2	52.8	53.2	53.6	54.0
23	52.0	52.5	51.6	51.2	52.0	51.7	50.6	50.7	51.2	51.2	52.1	52.9	53.1	53.0	52.8
24	52.1	52.0	51.9	51.7	51.6	51.0	50.1	50.1	50.5	51.9	52.3	53.1	53.3	53.0	52.9
25	52.0	52.0	51.8	51.9	51.6	51.2	50.8	50.5	50.6	51.0	51.1	51.3	52.0	52.1	52.7
26*	52.0	52.0	52.0	51.8	51.7	51.1	50.7	50.9	51.1	51.7	52.2	53.2	54.0	54.1	53.8
27*†	52.0	52.0	52.0	51.9	51.4	51.0	50.6	50.5	51.0	51.6	51.8	51.9	52.7	53.2	53.7
28*	52.0	51.6	51.8	52.0	51.2	51.1	50.4	49.9	50.1	52.0	52.7	53.2	53.4	53.1	53.1
29*†	52.1	52.0	52.0	52.0	51.3	51.1	50.0	50.1	50.5	52.0	53.0	53.0	53.1	53.0	52.4
30	52.1	52.0	52.0	51.9	51.9	51.5	50.8	50.2	51.0	51.6	52.1	52.5	53.1	53.1	53.1
Mean.....	52.0	51.9	51.8	51.5	51.2	50.6	49.4	49.2	49.8	51.1	52.3	53.2	53.8	53.7	53.3
Mean*.....	52.0	51.9	51.9	51.7	51.2	50.6	49.6	49.2	49.6	50.8	52.0	52.9	53.5	53.6	53.4
Mean†.....	52.2	52.1	51.9	51.7	51.2	50.7	49.6	48.9	49.4	50.7	52.1	53.0	53.7	53.8	53.3

OCTOBER, 1913.

2° WEST PLUS TABULAR QUANTITIES.

1*	52.1	52.1	52.1	52.0	51.6	51.4	50.4	50.0	50.6	52.1	53.5	54.1	54.1	54.0	53.9
2*†	52.6	52.3	52.2	52.0	52.0	51.1	50.8	49.1	49.2	50.1	51.2	52.2	53.7	54.2	54.1
3*†	52.3	52.2	52.2	52.2	52.2	52.1	51.2	51.0	50.6	51.1	52.1	53.1	54.1	54.0	53.3
4	52.3	52.3	52.2	52.2	52.1	51.4	51.1	51.0	51.4	52.7	53.2	52.9	53.2	54.1	54.1
5	52.2	52.0	52.2	52.1	52.1	51.9	50.1	49.2	50.1	51.5	52.1	52.2	53.1	54.0	54.4
6	51.4	52.8	51.8	54.0	51.2	51.1	50.9	51.2	50.3	50.2	51.1	50.9	51.7	53.0	53.1
7	53.1	52.4	53.5	54.1	53.1	52.3	54.0	53.4	53.2	54.0	54.2	54.2	54.6	54.2	53.6
8	52.8	53.0	53.2	53.1	52.0	52.2	51.8	50.7	51.0	52.2	53.3	53.2	53.0	53.0	53.1
9	52.3	52.6	52.4	52.2	52.1	52.1	52.0	52.3	52.8	53.8	53.8	53.9	53.1	53.1	53.7
10	52.1	53.1	52.1	52.2	53.4	52.7	52.6	52.2	51.4	51.4	52.1	53.0	53.1	54.1	53.6
11	53.5	52.6	52.2	52.2	52.2	52.1	51.1	50.4	51.1	52.1	52.1	52.1	52.1	52.0	52.1
12	52.9	52.7	52.6	52.3	52.7	52.3	51.3	50.2	50.1	51.2	52.5	53.3	53.6	53.8	54.4
13	52.9	53.1	53.2	53.0	52.6	52.7	52.1	51.1	51.2	52.1	53.1	53.8	53.9	54.1	54.1
14	53.2	52.8	53.0	52.7	52.3	52.1	51.4	51.2	51.2	51.6	52.0	52.2	52.4	53.3	53.8
15	52.9	53.1	52.8	52.3	52.2	52.1	50.8	50.2	49.9	51.0	52.1	53.1	53.1	53.3	54.2
16*	53.1	53.1	53.1	52.8	52.7	52.6	52.2	51.1	50.2	50.6	51.1	52.1	52.3	53.1	53.4
17*	53.1	53.1	53.1	53.0	52.8	52.7	52.0	51.1	50.2	50.3	51.1	51.3	52.9	54.3	55.1
18	53.1	53.1	53.1	52.8	52.7	52.8	52.2	51.1	50.2	51.1	52.1	52.5	54.1	55.7	55.9
19	51.8	53.0	53.1	53.5	53.1	53.1	52.3	51.3	51.2	51.4	52.6	54.0	54.3	54.1	53.5
20	52.6	52.2	53.0	52.9	54.1	52.4	52.8	51.1	51.2	51.3	52.1	52.4	52.9	53.1	53.4
21	53.1	53.4	53.4	53.1	53.0	52.7	52.1	50.8	49.3	49.1	50.1	52.0	53.3	54.2	54.4
22*	53.1	53.1	53.0	52.9	52.5	52.4	51.7	51.1	50.6	51.5	52.7	53.9	54.1	54.7	54.9
23*†	53.1	53.1	53.1	52.9	52.7	52.5	51.8	50.2	49.2	49.1	49.0	51.1	52.1	53.6	54.6
24*†	53.0	53.1	53.1	53.0	52.8	52.9	53.0	51.7	50.6	50.4	51.1	51.3	52.1	52.8	53.1
25	53.1	52.9	52.8	52.6	52.6	52.6	52.6	51.2	50.7	51.1	52.2	53.2	53.1	52.6	52.1
26	53.1	53.1	53.1	53.1	52.8	52.7	52.3	51.7	51.3	52.1	53.2	54.0	54.1	54.4	54.8
27	53.1	53.1	53.1	53.1	52.9	52.8	52.4	52.0	51.3	52.0	53.1	53.2	53.1	53.4	54.1
28*†	53.1	53.1	53.1	53.0	52.8	52.8	52.1	51.2	51.2	51.4	52.0	52.1	52.3	53.1	54.1
29*	53.2	53.1	53.1	53.1	52.9	52.8	52.4	52.2	52.1	52.2	52.1	52.2	52.4	52.3	53.9
30	53.3	53.2	53.1	53.1	53.0	52.8	52.3	51.4	50.8	50.8	51.1	52.7	53.8	53.8	54.0
31	52.8	53.2	53.1	53.1	53.1	53.1	53.2	52.1	51.1	51.3	52.3	53.5	54.3	55.0	55.1
Mean.....	52.8	52.8	52.8	52.8	52.6	52.4	51.9	51.1	50.8	51.4	52.1	52.8	53.2	53.7	53.9
Mean*.....	52.9	52.8	52.8	52.7	52.5	52.3	51.8	50.9	50.4	50.9	51.6	52.3	53.0	53.6	54.0
Mean†.....	52.8	52.8	52.7	52.6	52.5	52.3	51.8	50.6	50.2	50.4	51.1	52.0	52.9	53.5	53.8

* Ten least disturbed days.

† Five international quiet days. Sept. 15 used instead of Sept. 14.

HOURLY VALUES OF DECLINATION.

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SEPTEMBER, 1913.

2° WEST PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum		Minimum		Range	Day
										<i>h</i>	<i>m</i>	<i>h</i>	<i>m</i>		
52.6	51.8	51.5	51.6	51.8	51.7	51.9	51.8	51.8	51.4	13	00	54.9	6 41	46.4	8.5
53.5	52.0	52.0	51.6	51.6	51.2	51.3	51.0	51.1	51.6	13	20	56.1	7 07	45.2	10.9
52.9	52.0	51.9	51.9	51.8	51.4	51.5	51.7	51.8	51.1	14	00	54.0	7 43	46.1	7.9
53.4	52.0	51.7	51.9	51.4	51.6	51.6	51.5	51.5	51.6	14	00	56.0	8 30	46.1	9.9
53.0	52.2	52.1	52.1	52.0	51.0	51.2	51.5	51.6	51.0	14	15	53.2	8 15	46.5	6.7
53.0	52.8	52.0	51.2	51.7	51.4	51.3	51.5	51.7	51.4	14	00	53.6	8 30	47.1	6.5
52.1	52.0	52.0	52.0	51.4	51.6	50.3	51.0	51.3	51.8	12	40	54.1	7 00	49.0	5.1
52.9	52.9	52.1	50.1	51.2	51.9	51.8	53.1	52.1	52.0	12	34	54.5	6 30	48.5	6.0
53.0	52.2	51.9	52.0	52.1	52.1	52.2	52.0	52.0	51.8	0	14	55.1	7 03	49.1	6.0
52.1	52.0	52.0	51.9	51.3	52.0	52.0	51.9	51.5	51.9	12	00	53.1	6 30	50.0	3.1
52.1	51.6	51.7	51.9	52.0	52.0	51.8	51.9	52.0	52.1	11	38	54.4	7 15	48.9	5.5
52.0	51.5	51.6	52.0	51.6	51.9	51.8	51.9	52.0	51.9	12	12	54.8	7 08	48.5	6.3
52.1	51.3	51.6	51.8	51.9	(52.0)	(52.0)	(52.0)	(52.0)	(51.9)	13	00	55.4	8 02	48.9	6.5
51.6	51.3	51.9	52.0	51.9	52.0	52.0	52.0	52.0	51.9	12	15	55.0	(8 00)	49.1	5.9
51.9	51.8	52.0	52.0	52.1	52.0	52.1	52.0	52.8	51.8	12	30	54.3	7 30	48.0	6.3
52.0	51.9	52.0	52.0	52.0	52.0	52.0	52.0	52.0	51.8	13	00	54.0	7 42	48.4	5.6
52.9	52.4	52.2	52.1	52.0	52.1	52.0	52.0	52.1	51.8	13	04	54.1	8 39	47.9	6.2
53.4	52.1	52.2	52.1	52.0	52.1	52.0	52.0	52.0	51.8	13	18	55.3	8 20	48.0	7.3
54.0	53.1	52.7	52.7	52.1	52.0	52.0	52.0	52.0	51.5	15	00	54.1	8 35	47.1	7.0
53.0	52.5	52.2	52.0	52.0	52.0	52.0	52.0	52.0	51.7	14	00	53.3	9 00	49.0	4.3
53.9	53.3	52.8	52.3	52.2	52.1	52.0	52.0	52.0	51.9	16	00	53.9	8 22	50.0	3.9
53.9	53.1	52.5	52.4	51.5	51.3	51.3	51.1	52.0	52.2	15	00	54.0	4 25	51.1	2.9
52.1	52.1	52.4	52.1	52.1	52.1	52.1	52.1	52.1	52.0	13	15	53.1	7 22	50.1	3.0
53.0	53.0	52.9	52.5	52.1	52.2	51.3	52.1	52.0	52.0	12	48	53.3	7 33	50.0	3.3
53.1	53.0	52.8	52.3	52.2	52.1	52.0	52.0	52.0	51.8	16	00	53.1	8 00	50.5	2.6
53.2	53.1	52.9	52.5	52.2	52.1	52.1	52.0	52.0	52.3	14	04	54.1	7 27	50.6	3.5
53.2	53.1	52.8	52.7	52.6	52.3	52.1	52.2	52.1	52.1	15	00	53.7	7 30	50.3	3.4
53.1	53.1	52.7	52.5	52.3	52.2	52.1	52.1	52.1	52.1	12	30	53.5	8 00	49.9	3.6
52.7	53.0	52.9	52.4	52.3	52.1	52.1	52.0	52.1	52.1	13	00	53.1	7 00	50.0	3.1
53.0	52.6	52.4	52.1	52.1	52.1	52.1	52.0	51.8	52.0	14	38	53.2	8 00	50.2	3.0
52.8	52.4	52.2	52.0	51.9	51.9	51.8	51.9	51.9	51.8						5.5
53.0	52.6	52.4	52.2	52.1	52.0	52.0	52.0	52.0	51.8						5.1
52.8	52.5	52.3	52.2	52.1	51.9	51.9	52.0	52.0	51.8						

OCTOBER, 1913.

2° WEST PLUS TABULAR QUANTITIES.

53.6	53.5	53.1	52.7	52.5	52.4	52.5	52.5	52.7	52.5	12 00	54.1	8 00	50.0	4.1	1
53.6	53.2	53.1	52.7	52.5	52.4	52.2	52.2	52.6	52.1	14 00	54.2	8 25	48.9	5.3	2
53.1	53.1	52.8	52.2	52.2	52.2	52.2	52.4	52.3	52.3	13 05	54.1	9 00	50.6	3.5	3
53.6	53.2	53.0	52.9	52.7	52.0	52.1	52.2	52.6	52.5	15 00	54.1	7 40	50.5	3.6	4
54.4	54.2	53.1	52.8	52.6	52.1	51.7	51.9	52.1	52.3	15 30	54.5	8 30	49.0	5.5	5
53.1	53.2	53.1	53.1	52.8	52.7	52.0	52.6	53.1	52.1	3 45	54.1	9 37	50.1	4.0	6
53.6	53.1	52.5	52.5	52.4	52.4	52.3	52.3	53.0	53.2	13 00	54.6	5 20	52.1	2.5	7
52.8	53.4	52.8	52.4	53.0	52.6	52.6	52.6	52.6	52.6	3 18	54.5	8 05	50.6	3.9	8
53.6	53.2	53.3	51.1	52.3	52.6	52.9	52.6	52.6	52.7	10 18	54.1	19 00	51.1	3.0	9
53.1	53.6	53.0	52.7	52.9	52.3	53.1	52.8	53.0	52.7	14 00	54.1	10 00	51.4	2.7	10
53.3	54.0	53.2	53.1	53.1	53.0	53.0	53.1	53.1	52.4	17 00	54.0	8 00	50.4	3.6	11
54.3	53.8	52.9	52.8	52.8	53.1	52.5	52.7	52.6	52.6	15 20	54.6	9 00	50.1	4.5	12
53.7	53.6	53.0	52.8	52.2	52.3	53.1	53.1	52.9	52.9	14 20	54.2	8 00	51.1	3.1	13
53.4	53.4	53.1	52.8	52.8	53.0	53.1	53.1	53.1	52.6	14 25	53.8	8 28	51.1	2.7	14
54.2	54.2	53.5	53.0	52.9	52.7	52.8	52.8	52.9	52.6	15 30	54.3	9 00	49.9	4.4	15
53.8	53.8	53.4	53.1	53.1	53.0	53.0	53.1	53.1	52.6	16 00	53.8	9 00	50.2	3.6	16
54.9	54.2	53.3	53.1	53.1	52.9	52.8	53.0	53.1	52.8	15 00	55.1	9 07	50.1	5.0	17
56.1	55.0	54.4	53.3	52.3	52.1	51.4	52.1	52.2	53.0	16 00	56.1	9 00	50.2	5.9	18
53.2	53.1	52.8	52.4	52.3	52.5	53.0	53.1	52.2	52.8	13 00	54.3	8 42	51.1	3.2	19
53.9	53.7	53.0	53.0	52.8	52.3	52.8	53.0	53.1	52.7	5 00	54.1	8 00	51.1	3.0	20
53.8	53.1	52.8	52.9	52.9	53.0	53.1	52.8	52.9	52.6	15 00	54.4	10 00	49.1	5.3	21
54.2	53.4	53.0	53.0	53.0	53.0	53.1	53.1	53.1	53.0	14 35	55.0	9 00	50.6	4.4	22
54.7	53.9	53.1	53.1	53.0	52.9	52.9	53.0	53.1	52.4	15 30	55.0	10 00	49.1	5.9	23
53.2	53.7	53.2	53.2	53.1	53.1	53.2	53.2	53.1	52.6	16 00	53.2	9 30	50.2	3.0	24
52.1	53.1	53.2	53.1	53.0	53.1	53.1	53.1	53.1	52.6	12 00	53.2	8 50	50.4	2.8	25
54.3	54.0	53.2	53.1	53.1	53.1	53.1	53.1	53.1	53.2	14 40	54.9	9 00	51.3	3.6	26
54.2	53.8	53.2	53.1	53.1	53.1	53.1	53.1	53.1	53.0	16 00	54.2	9 00	51.3	2.9	27
54.1	53.4	53.1	52.9	52.9	52.9	53.0	53.1	53.1	52.7	16 00	54.1	9 00	51.2	2.9	28
53.7	53.4	53.2	53.1	53.1	53.1	53.1	53.1	53.1	52.9	15 00	53.9	9 00	52.1	1.8	29
53.8	53.9	53.8	53.2	52.4	51.1	52.1	51.9	52.7	52.7	15 00	54.0	9 35	50.4	3.6	30
54.2	53.9	53.1	52.4	53.0	52.7	52.7	52.7	53.1	53.1	15 00	55.1	9 00	51.1	4.0	31
53.8	53.6	53.1	52.8	52.8	52.6	52.7	52.8	52.9	52.7					3.8	
53.9	53.6	53.1	52.9	52.8	52.8	52.8	52.9	52.9	52.6					4.0	
53.7	53.5	53.1	52.8	52.8	52.8	52.7	52.8	52.9	52.5						

NOVEMBER, 1913.

2° WEST PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1	53.2	53.5	53.4	53.1	53.3	52.8	53.1	52.1	51.8	52.1	52.6	53.2	54.7	55.0	55.0
2	54.2	54.5	53.3	54.0	54.1	53.2	52.2	50.5	50.6	50.1	51.2	52.4	53.2	54.8	55.6
3	53.3	53.8	53.7	53.6	53.2	53.4	52.1	51.8	51.2	50.2	50.4	51.2	52.4	54.0	54.5
4*†	53.6	53.9	53.8	53.4	53.5	53.1	52.4	51.8	51.3	52.1	52.2	54.5	55.1	55.1	55.1
5*	53.4	53.3	53.3	53.2	53.6	53.2	52.8	51.9	51.2	51.4	52.2	52.4	52.7	53.5	54.1
6	53.5	53.9	53.9	53.8	53.6	53.1	53.0	51.3	50.3	50.4	51.2	52.3	53.1	53.4	54.1
7	53.2	53.1	53.4	53.5	53.2	53.2	53.3	52.8	52.2	52.1	52.2	53.2	53.1	52.5	53.1
8	54.0	54.5	53.5	53.3	53.5	53.2	53.9	53.2	52.8	52.0	52.0	53.2	54.0	54.1	54.1
9	54.1	54.3	54.0	53.9	53.3	53.2	53.2	52.5	51.9	52.1	53.1	53.3	53.3	53.8	54.2
10	....	....	....	....	....	....	....	52.1	51.3	51.2	52.0	53.1	53.9	54.1	54.5
11	53.4	53.9	53.8	53.8	53.8	53.6	52.6	51.8	50.9	51.0	51.9	52.9	53.1	54.1	54.9
12	53.8	53.8	53.8	53.8	53.8	53.6	52.8	51.9	51.4	51.8	52.9	54.1	54.8	54.7	54.4
13	53.8	53.8	53.7	53.8	53.7	53.7	53.0	51.9	51.4	51.4	51.9	53.1	53.8	54.3	54.7
14*†	53.6	53.6	53.6	53.5	53.2	53.2	52.7	52.1	51.5	51.5	52.6	53.4	53.8	54.2	54.6
15*†	53.5	53.6	53.6	53.6	53.4	53.1	53.1	51.9	51.4	51.2	51.6	52.7	53.5	54.4	54.7
16*†	54.1	54.1	54.2	54.2	53.8	53.6	53.5	53.0	52.4	52.4	52.6	53.7	54.5	55.4	55.5
17	53.6	54.1	53.7	53.5	53.4	53.3	52.4	51.5	51.4	51.5	53.4	54.5	55.4	55.5	55.4
18	54.3	54.3	54.7	54.4	54.2	54.0	53.5	52.3	51.6	51.5	52.3	53.1	54.3	54.8	54.9
19	54.2	54.3	54.4	54.4	54.3	54.1	54.0	53.0	51.7	51.2	51.4	52.4	54.2	55.4	56.0
20	54.1	54.1	54.1	54.1	54.1	54.0	54.1	53.1	52.1	51.9	52.5	53.6	54.2	54.1	54.8
21*	53.9	54.0	54.0	53.9	53.9	54.0	54.1	53.2	52.0	51.3	52.1	53.4	55.1	56.0	55.3
22*	54.0	54.1	54.3	54.0	53.9	53.9	53.9	52.4	51.2	50.7	51.7	52.9	54.0	54.9	55.4
23*	54.4	54.5	54.6	54.4	54.1	54.0	53.9	52.7	51.7	51.8	52.9	54.0	55.0	55.3	55.7
24*	54.6	54.4	54.3	54.1	54.0	53.9	54.0	53.2	52.9	52.9	53.5	54.9	55.6	55.3	55.4
25*†	54.0	53.9	53.8	53.8	53.5	53.3	52.9	52.3	52.8	53.8	54.8	55.8	55.9	56.0	55.8
26	54.8	54.8	54.8	54.7	54.3	54.1	53.9	53.0	52.5	51.5	52.0	53.8	54.9	55.1	55.0
27	54.3	54.3	54.2	54.0	53.9	54.0	54.1	53.2	52.8	52.1	52.4	53.8	54.4	55.0	55.8
28	54.8	54.7	55.7	54.4	54.6	53.9	53.7	53.5	51.7	51.2	52.3	53.6	54.7	55.6	55.6
29	53.9	54.4	54.5	54.4	54.7	54.0	53.7	52.4	50.8	50.6	51.6	52.8	53.8	54.8	55.4
30	54.7	54.7	54.7	54.7	54.7	54.5	54.2	53.3	52.6	51.9	52.7	53.7	54.7	55.2	55.2
Mean.....	53.9	54.1	54.0	53.9	53.8	53.6	53.3	52.4	51.7	51.6	52.3	53.4	54.2	54.7	55.0
Mean*.....	53.9	53.9	54.0	53.8	53.7	53.5	53.3	52.4	51.8	51.9	52.7	53.8	54.5	55.0	55.2
Mean†.....	53.8	53.8	53.8	53.7	53.5	53.3	52.9	52.2	51.9	52.2	53.0	54.0	54.6	55.0	55.1

DECEMBER, 1913.

2° WEST PLUS TABULAR QUANTITIES.

1	54.1	54.5	54.4	53.9	53.6	53.7	53.6	53.1	52.7	52.7	53.4	53.8	55.5	55.7	55.6
2	53.9	54.1	54.0	53.8	53.7	53.7	53.8	52.7	52.3	51.6	52.4	53.7	54.7	55.4	55.8
3	54.7	55.2	55.2	55.2	55.2	54.8	54.5	53.5	52.5	52.0	52.4	53.4	54.2	55.5	56.2
4	54.5	54.5	54.5	54.5	54.4	53.8	51.6	54.2	54.1	53.5	52.6	53.5	54.7	55.6	56.3
5	54.4	54.5	55.6	54.3	53.7	53.5	53.7	53.4	52.6	52.8	52.8	53.1	53.5	54.1	54.9
6	54.5	54.9	55.1	54.5	54.4	54.5	55.1	54.4	53.6	53.1	52.5	53.3	54.4	55.0	55.4
7	54.4	54.4	54.5	54.6	54.6	54.7	54.8	54.3	54.0	53.9	53.3	53.0	53.3	54.3	55.3
8	54.4	54.9	54.8	54.6	54.6	54.4	55.3	54.4	54.0	54.0	54.3	54.5	54.9	54.5	55.3
9	54.3	54.4	54.7	54.5	54.4	54.3	51.4	53.5	52.9	52.5	52.6	53.9	55.3	56.7	56.7
10*†	54.4	54.5	54.5	54.4	54.3	54.3	54.9	54.1	53.1	52.2	52.5	53.6	54.5	55.3	56.2
11*†	54.9	54.8	55.0	55.0	54.9	54.9	55.1	54.8	54.1	54.2	55.2	56.3	56.8	56.2	56.2
12*	55.1	55.2	55.2	55.1	54.9	54.9	55.1	54.3	53.4	52.4	52.4	53.2	55.1	55.8	56.1
13*†	54.9	55.0	54.9	54.6	54.2	54.1	54.1	53.2	53.0	53.0	53.8	54.2	55.0	55.9	56.0
14	55.0	55.0	55.0	55.0	54.9	54.8	54.3	53.0	52.8	53.4	54.4	56.0	56.1	56.1	55.9
15*	55.0	55.1	55.0	55.0	54.9	54.7	55.0	54.1	53.2	53.1	53.0	53.3	54.0	55.1	55.8
16	54.7	55.1	55.1	55.0	55.0	55.0	55.1	54.8	54.2	54.1	54.6	54.7	55.3	56.1	56.1
17*†	55.0	55.1	55.1	54.9	54.8	54.4	54.7	54.1	53.2	53.6	54.2	55.2	56.1	56.2	56.2
18*	54.9	55.1	55.1	55.1	54.7	54.3	54.4	53.9	53.1	52.9	53.5	54.8	55.8	56.2	56.2
19	54.8	54.9	55.2	55.0	54.4	54.6	54.7	54.2	53.4	54.2	55.4	56.0	56.5	57.2	57.2
20	55.1	55.2	55.1	54.9	54.5	54.4	54.4	53.9	53.1	53.0	53.2	55.1	56.6	57.2	56.8
21*	55.2	55.2	55.2	55.2	55.2	55.2	55.4	55.1	54.3	53.2	53.2	55.2	56.6	57.2	57.0
22*	55.0	55.0	55.2	55.2	55.2	55.2	55.4	55.0	54.3	53.7	53.4	53.6	55.2	56.3	56.8
23*†	55.2	55.2	55.2	55.1	55.1	55.0	55.3	54.7	54.5	54.3	54.1	54.4	55.3	55.7	56.2
24	54.6	54.7	54.8	54.7	54.8	54.7	55.4	54.9	54.3	54.3	55.1	55.3	56.3	56.7	56.5
25	54.6	54.6	55.4	54.6	54.7	54.8	55.2	54.4	53.4	53.4	54.0	55.1	55.8	56.4	56.2
26	55.5	56.4	55.6	54.6	55.1	54.8	55.4	54.8	53.8	53.7	54.4	54.6	54.6	55.5	55.4
27	55.4	55.4	55.1	54.6	54.5	54.5	54.7	54.4	53.7	53.5	53.8	53.9	54.7	55.5	55.5
28	55.5	55.5	55.4	55.0	54.7	54.5	55.2	54.9	54.4	54.5	53.7	54.5	55.6	55.8	55.5
29	55.4	55.4	55.3	55.3	55.2	54.8	55.2	54.7	54.3	54.5	55.5	56.5	56.7	56.6	56.1
30	55.5	55.5	55.4	55.3	54.9	54.5	54.7	53.7	53.2	53.5	54.0	55.7	56.6	56.7	56.2
31	55.5	55.5	55.5	55.4	54.6	54.5	54.9	54.6	53.8	53.7	54.8	56.0	56.5	56.6	56.5
Mean.....	54.9	55.0	55.0	54.8	54.6	54.5	54.8	54.2	53.5	53.4	53.7	54.5	55.4	55.9	56.1
Mean*.....	55.0	55.0	55.0	55.0	54.8	54.7	54.9	54.3	53.6	53.3	53.5	54.4	55.4	56.0	56.3
Mean†.....	54.9	54.9	54.9	54.8	54.7	54.5	54.8	54.2	53.6	53.5	54.0	54.7	55.5	55.9	56.2

* Ten least disturbed days.

† Five international quiet days.

HOURLY VALUES OF DECLINATION.

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NOVEMBER, 1913.

2° WEST PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum		Minimum		Range	Day
'	'	'	'	'	'	'	'	'	'	<i>h</i>	<i>m</i>	<i>h</i>	<i>m</i>	'	
54.1	53.3	53.0	52.9	53.0	52.8	52.4	52.8	53.1	53.2	14	30	55.1	8	39	1
55.1	54.1	52.6	51.4	52.1	51.8	51.2	52.0	52.2	52.8	15	00	55.6	10	15	2
54.3	54.1	53.2	53.1	53.1	53.1	53.1	53.1	53.3	52.9	15	00	54.5	10	15	3
54.7	54.1	53.2	53.1	53.1	53.1	53.1	53.1	53.2	53.4	15	00	55.1	9	00	4
54.2	54.1	53.3	53.3	53.1	53.2	53.1	53.1	53.2	53.0	16	00	54.2	9	00	5
54.1	53.9	53.3	52.8	52.2	53.1	52.3	52.2	53.1	52.8	15	00	54.1	9	22	6
54.1	54.3	54.0	53.3	52.6	53.1	53.4	53.3	53.4	53.2	17	00	54.3	10	12	7
54.1	53.7	53.5	53.2	53.3	53.4	53.5	53.9	53.7	53.5	1	53	54.8	10	45	8
54.2	54.1	53.3	53.2	53.3	53.3	53.4	(53.8)	(53.9)	53.4	1	41	54.7	8	51	9
54.6	54.1	53.4	53.2	53.2	53.2	53.2	53.7	53.8	....	15	40	54.7	9	40	10
54.7	54.1	53.5	53.4	53.4	53.4	53.0	53.4	53.7	53.3	15	00	54.9	9	00	11
54.1	53.9	53.7	53.6	53.1	53.0	53.0	53.3	53.8	53.5	13	00	54.8	9	00	12
54.2	53.8	53.3	53.1	53.0	52.9	53.0	53.3	53.6	53.3	15	00	54.7	9	00	13
54.5	53.8	53.5	53.4	53.3	53.5	53.3	53.4	53.6	53.3	15	00	54.6	9	45	14
54.6	53.8	53.5	53.4	53.2	53.3	53.5	53.6	53.7	53.2	15	30	54.8	9	40	15
55.2	54.2	53.5	53.2	53.2	53.2	53.4	53.5	53.6	53.8	15	00	55.5	10	00	16
54.9	53.7	53.5	53.4	53.5	53.4	53.5	53.7	54.0	53.6	14	00	55.5	9	00	17
54.9	54.2	53.3	53.3	53.3	53.3	53.6	53.7	54.2	53.7	15	20	55.0	10	00	18
55.3	54.2	53.6	53.5	53.4	53.3	53.4	53.7	54.0	53.7	15	00	55.0	10	00	19
54.6	54.0	53.4	53.5	53.2	53.3	53.3	53.7	53.9	53.7	15	20	54.9	9	40	20
54.7	54.0	53.9	53.9	53.9	54.0	53.9	54.0	54.0	53.9	14	00	55.0	10	00	21
55.5	54.8	54.3	54.2	54.1	54.0	54.0	54.3	54.4	53.8	16	00	55.5	10	00	22
55.5	55.0	54.5	54.1	54.0	54.0	54.1	54.4	54.5	54.1	15	00	55.7	9	30	23
54.9	54.6	54.2	54.0	54.0	53.9	53.9	54.0	54.1	54.2	13	00	55.6	9	00	24
54.9	54.5	53.9	53.9	53.8	53.9	53.9	54.5	54.6	54.2	14	00	55.0	8	00	25
54.8	54.7	53.9	53.9	53.8	53.5	53.9	54.2	54.4	54.0	14	00	55.1	10	00	26
55.3	55.3	54.1	53.8	53.8	53.8	53.9	54.5	54.8	54.1	15	00	55.8	10	35	27
54.8	54.0	52.9	53.4	53.2	53.5	53.7	53.8	53.9	53.9	14	40	55.0	9	48	28
55.0	54.5	53.8	53.7	53.7	53.7	53.7	54.0	54.6	53.7	15	00	55.4	10	00	29
54.8	54.6	53.8	53.7	53.7	53.7	53.7	52.8	53.7	54.0	14	48	55.5	9	53	30
54.7	54.2	53.6	53.4	53.3	53.4	53.4	53.6	53.8	53.5					3.8	
54.9	54.3	53.8	53.6	53.6	53.6	53.6	53.8	53.9	53.7					3.7	
54.8	54.1	53.5	53.4	53.3	53.3	53.4	53.5	53.7	53.6						

DECEMBER, 1913.

2° WEST PLUS TABULAR QUANTITIES.

55.3	54.6	53.9	53.6	53.5	53.4	53.6	53.7	53.8	54.0	14	00	55.7	9	30	52.6	3.1	1
55.6	54.7	54.3	54.2	53.9	54.1	54.3	54.5	54.6	54.0	15	15	53.0	10	00	51.6	4.4	2
55.7	55.6	54.8	54.6	54.5	54.2	54.0	54.3	54.4	54.4	15	00	53.2	10	00	52.0	4.2	3
55.5	55.3	54.6	54.5	54.3	54.3	54.3	54.6	54.5	54.5	16	00	55.5	11	00	52.6	3.9	4
55.4	54.8	54.4	54.2	54.1	54.1	54.1	43.8	54.3	54.0	2	32	55.9	9	00	52.6	3.3	5
55.4	54.9	54.4	54.3	54.1	54.1	54.1	54.3	54.5	54.4	16	00	55.4	11	00	52.5	2.9	6
55.5	54.3	53.8	54.3	54.1	54.1	54.3	54.3	54.3	54.3	16	00	55.5	12	00	53.0	2.5	7
55.4	54.4	54.4	54.4	54.4	54.3	54.3	54.5	54.4	54.6	16	00	55.4	10	00	54.0	1.4	8
55.9	55.1	54.5	54.2	54.2	54.2	54.2	54.2	54.3	54.4	14	38	55.9	10	00	52.5	4.4	9
55.9	55.0	54.6	54.4	54.5	54.6	54.8	54.9	55.0	54.4	15	00	56.2	10	00	52.2	4.0	10
56.2	55.9	55.1	55.0	55.0	55.1	55.1	55.1	55.1	55.2	12	35	57.1	9	00	54.1	3.0	11
55.9	55.2	54.8	54.5	54.5	54.5	54.6	54.8	54.9	54.7	15	00	56.1	10	13	52.3	3.8	12
55.8	55.1	54.6	54.4	54.3	54.3	54.4	54.6	54.9	54.5	15	00	55.0	10	00	53.0	3.0	13
55.7	55.0	54.7	54.4	54.4	54.2	54.8	55.0	55.1	54.8	13	40	55.4	9	00	52.8	3.6	14
55.2	55.0	54.3	54.2	54.1	54.1	54.3	54.7	54.4	54.4	15	00	55.8	11	00	53.0	2.8	15
55.6	55.0	54.3	54.3	54.2	54.6	54.8	54.8	54.8	54.9	15	00	56.1	10	00	54.1	2.0	16
55.7	55.1	54.6	54.4	54.3	54.3	54.4	54.7	54.8	54.8	15	00	56.2	9	00	53.2	3.0	17
55.8	55.1	54.4	54.4	54.3	54.1	54.1	54.2	54.6	54.6	14	25	56.4	10	00	52.9	3.5	18
55.4	55.3	54.7	54.5	54.6	54.5	54.7	54.7	54.9	55.1	14	25	57.3	8	37	53.3	4.0	19
56.2	55.2	54.8	54.6	54.4	54.4	54.6	54.8	55.0	54.9	14	00	57.2	9	25	52.9	4.3	20
56.2	55.3	54.9	54.9	54.7	54.6	54.7	54.5	54.5	55.1	14	40	57.2	10	30	52.5	4.7	21
56.3	55.5	55.2	55.1	55.0	55.0	54.9	54.9	55.0	55.1	15	00	56.8	11	45	53.3	3.5	22
55.8	55.3	54.8	54.8	54.7	54.6	54.6	54.5	54.5	55.0	15	00	56.2	11	00	54.1	2.1	23
56.2	55.3	55.0	54.6	54.4	54.3	54.3	54.4	55.1	55.0	14	00	56.7	9	00	54.3	2.4	24
55.8	55.4	55.3	54.7	54.7	54.7	53.6	55.1	55.3	54.9	14	00	56.4	21	35	52.7	3.7	25
55.4	55.1	54.7	54.6	54.6	55.1	55.1	55.3	55.4	55.0	1	42	56.7	9	30	53.5	3.2	26
55.1	55.0	54.5	54.5	54.5	54.5	54.7	55.2	55.3	54.7	15	00	55.5	10	00	53.5	2.0	27
55.3	54.7	54.6	54.6	54.6	54.6	54.6	54.9	55.1	54.9	13	45	55.9	11	00	53.7	2.2	28
55.5	54.8	54.5	54.5	54.5	54.6	54.7	54.9	55.5	55.2	13	20	56.8	9	00	54.3	2.5	29
55.5	54.8	54.5	51.5	54.5	54.5	54.6	55.2	55.4	55.0	13	48	56.9	9	00	53.2	3.7	30
55.8	55.4	55.1	55.0	54.8	54.8	54.9	55.1	55.4	55.2	14	00	56.6	9	30	53.6	3.0	31
55.7	55.1	54.6	54.5	54.4	54.4	54.5	54.7	54.8	54.7						3.2		
55.9	55.2	54.7	54.6	54.5	54.6	54.6	54.7	54.8	54.8						3.3		
55.9	55.3	54.7	54.6	54.5	54.6	54.7	54.7	54.8	54.8								

JANUARY, 1914.

2° WEST PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1*	55.6	55.7	55.9	55.6	55.6	55.3	55.6	55.5	54.8	54.7	54.5	54.5	55.6	56.3	56.6
2	55.3	55.4	55.4	54.9	54.8	54.7	55.4	54.9	54.5	53.6	53.6	53.8	54.3	55.0	55.3
3	55.0	55.3	55.3	55.1	54.8	54.6	54.7	53.8	53.4	53.5	53.7	55.6	56.3	56.3	56.0
4	55.4	55.4	55.1	55.2	55.0	54.7	54.8	54.6	53.3	52.8	52.8	54.9	56.8	57.4	56.7
5	54.9	54.8	54.9	55.0	54.8	54.7	54.9	54.4	53.0	53.6	55.0	56.6	57.0	57.1	56.8
6	54.8	55.2	55.2	54.8	54.8	54.8	55.4	54.8	53.8	53.7	53.9	55.8	56.0	56.5	56.3
7	55.1	55.2	55.1	55.1	55.0	55.0	55.1	54.6	54.0	53.8	53.9	54.5	55.0	56.0	56.4
8	55.3	55.2	55.3	55.3	55.2	55.1	55.2	54.4	53.2	52.4	53.1	55.0	56.1	56.2	56.3
9*†	55.3	55.3	55.3	55.3	55.3	55.3	55.3	54.8	53.9	53.1	53.1	54.4	55.4	55.5	55.9
10*†	55.5	55.5	55.5	55.5	55.4	55.4	55.7	54.8	53.4	52.5	54.5	55.8	56.3	56.9	56.9
11*	54.9	54.9	55.0	54.9	54.9	54.8	55.2	54.3	53.2	52.4	54.2	56.2	56.5	56.9	56.3
12	55.1	55.0	55.0	55.0	55.0	55.0	55.1	54.1	53.2	52.8	54.3	55.4	55.5	55.6	55.5
13	55.1	55.0	55.1	55.2	55.3	55.0	54.9	53.9	52.8	52.8	54.9	56.3	56.4	56.0	55.2
14	55.0	55.1	55.2	55.7	55.5	55.3	55.2	54.6	53.9	53.9	55.2	56.1	56.9	56.6	55.3
15	55.5	56.0	56.1	56.1	55.5	55.2	55.1	54.2	53.9	54.7	56.2	57.4	57.6	57.1	56.1
16	55.2	56.0	55.2	55.2	55.2	55.1	54.8	54.2	53.4	54.1	54.3	55.2	55.2	55.3	55.2
17	54.3	54.4	54.8	54.9	54.9	55.2	54.9	54.9	53.4	53.2	54.1	55.7	56.3	56.2	55.4
18*	55.0	55.1	55.2	55.3	55.4	55.5	55.9	55.2	55.0	55.1	55.8	56.7	57.0	57.0	56.3
19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
21	56.4	56.4	56.4	56.4	56.4	56.2	56.5	56.5	55.9	55.0	55.0	55.0	55.7	56.2	56.5
22	56.0	56.0	56.0	56.7	56.2	56.0	56.0	55.1	54.0	53.1	53.9	54.5	55.1	55.9	56.5
23*	56.0	56.0	56.1	56.1	56.2	56.2	56.1	55.8	55.0	54.2	55.0	55.9	56.0	56.0	56.1
24*†	56.0	56.0	56.0	55.9	55.8	55.6	55.3	54.9	54.0	53.7	53.9	54.1	54.7	54.9	55.0
25*†	55.6	55.6	55.7	55.9	55.6	55.5	55.8	55.8	55.1	54.9	55.2	56.0	56.0	55.8	55.2
26*†	55.6	55.6	55.4	55.7	55.6	55.6	55.6	55.4	55.0	54.9	54.7	54.9	54.9	55.0	55.0
27*	55.3	55.6	55.9	55.9	55.8	55.8	55.9	55.9	55.6	55.1	55.2	55.8	55.9	55.9	55.9
28	55.8	55.8	55.9	55.8	55.8	55.8	55.7	55.7	55.0	54.8	54.9	55.5	55.4	55.0	54.9
29	55.8	55.8	55.9	55.8	55.8	55.5	55.7	55.8	55.8	55.7	55.8	56.5	56.8	56.8	56.2
30	55.5	55.7	55.7	55.8	55.7	55.7	55.7	55.5	55.1	55.2	55.6	55.9	56.0	55.8	55.8
31	55.9	55.9	55.9	55.9	55.8	55.8	55.6	54.8	54.1	54.1	54.8	56.8	56.3	56.6	56.6
Mean.....	55.4	55.5	55.5	55.5	55.4	55.3	55.4	54.9	54.2	53.9	54.5	55.5	56.0	56.1	55.9
Mean*.....	55.5	55.5	55.5	55.6	55.6	55.5	55.6	55.2	54.5	54.1	54.7	55.4	55.8	56.0	55.9
Mean†.....	55.6	55.6	55.6	55.7	55.5	55.5	55.5	55.1	54.3	53.8	54.3	55.0	55.5	55.6	55.6

FEBRUARY, 1914.

2° WEST PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1*†	55.7	55.6	55.7	55.6	55.6	55.6	55.6	55.5	55.4	55.4	55.7	55.9	56.5	56.7	56.7
2	55.7	55.7	55.8	55.7	55.7	55.7	55.6	54.7	53.8	53.8	54.6	55.7	56.6	56.7	56.8
3	55.7	55.7	55.7	55.8	55.8	55.9	56.3	56.5	55.8	55.0	54.8	55.0	55.6	55.7	56.1
4	55.8	55.8	55.8	55.9	55.9	55.7	55.8	55.7	55.1	54.7	55.3	56.0	56.3	56.4	56.5
5	56.1	55.8	55.7	55.8	55.8	55.5	55.7	55.4	55.0	54.4	54.5	55.3	55.5	56.1	56.6
6	55.6	56.2	55.0	55.1	54.7	55.2	55.6	55.7	55.0	55.5	56.2	56.7	56.9	57.5	56.7
7	55.8	56.2	56.1	55.8	55.7	55.8	56.5	56.5	55.7	55.5	55.4	55.4	55.5	56.5	57.4
8*	56.1	55.9	55.9	55.9	55.7	55.7	56.2	55.6	54.7	54.6	54.6	55.4	55.6	56.3	56.5
9*	56.4	56.5	56.5	56.5	56.4	55.9	56.5	55.8	55.4	55.0	55.0	55.1	55.3	55.6	56.5
10*†	56.6	56.6	56.6	56.5	56.4	56.1	56.4	55.7	55.2	55.1	55.5	55.7	56.6	56.7	57.3
11*†	56.3	56.5	56.4	56.3	56.3	56.5	57.1	56.8	55.8	55.5	55.5	55.6	55.7	55.8	56.6
12*	56.5	56.6	56.6	56.6	55.9	56.0	56.8	56.6	55.8	55.8	56.5	56.7	56.8	56.7	56.9
13	56.6	56.6	56.6	56.6	56.6	56.1	56.7	56.6	55.8	55.8	56.3	56.6	56.7	57.3	56.9
14	56.7	56.7	56.7	56.7	56.5	56.4	56.8	56.8	56.6	56.5	56.0	55.9	56.8	57.4	57.7
15	56.6	56.7	56.7	56.7	56.4	56.4	56.7	56.5	55.6	55.1	55.6	55.7	55.8	56.0	56.7
16	56.4	56.6	56.7	56.3	56.2	56.2	56.4	56.4	55.9	55.8	56.0	56.7	56.8	56.7	56.8
17	56.6	56.7	56.7	56.6	56.2	56.1	56.8	56.7	56.0	55.7	55.7	55.8	55.0	54.9	55.8
18	56.8	57.0	56.8	56.6	56.2	56.6	56.9	56.5	55.8	55.2	55.0	55.3	55.4	55.7	55.9
19	56.7	56.8	56.8	56.8	56.8	56.8	57.4	57.8	57.6	56.7	55.9	55.9	55.9	55.8	56.5
20	56.8	56.8	56.8	56.8	56.8	56.7	56.9	56.9	56.9	56.8	56.8	56.2	55.7	54.9	55.7
21*†	56.8	56.8	56.8	57.0	56.8	56.6	56.9	57.3	56.9	56.9	56.7	56.0	55.8	55.7	55.8
22	56.9	56.9	56.9	56.9	56.9	56.9	57.9	57.9	57.1	57.1	57.0	57.0	57.1	57.2	57.0
23	57.0	57.0	57.0	56.9	56.9	56.8	57.0	57.1	57.1	56.9	56.6	55.9	55.0	55.0	55.2
24	57.0	57.0	57.2	56.9	56.9	56.6	57.0	57.0	57.0	57.1	57.7	57.8	56.9	56.7	56.0
25*†	57.0	57.0	57.0	56.9	56.8	56.6	56.6	56.2	56.6	56.5	56.7	57.0	57.4	57.1	57.0
26*	56.9	57.0	57.0	57.0	56.9	56.7	(56.8)	57.0	57.0	57.8	58.3	58.5	58.7	58.3	57.9
27*	56.9	57.0	57.0	57.0	56.4	56.1	56.3	55.9	55.5	55.8	57.1	58.3	59.0	59.0	58.7
28	56.7	56.8	56.6	56.7	56.3	56.1	56.5	55.2	54.1	54.2	56.1	57.3	58.2	58.2	58.2
Mean.....	56.5	56.5	56.5	56.4	56.3	56.2	56.6	56.4	55.9	55.7	56.0	56.2	56.4	56.5	56.7
Mean*.....	56.5	56.5	56.6	56.5	56.3	56.2	56.5	56.2	55.9	55.8	56.2	56.4	56.7	56.8	57.0
Mean†.....	56.5	56.5	56.5	56.5	56.4	56.3	56.5	56.3	56.0	55.9	56.0	56.0	56.4	56.4	56.7

* Ten least disturbed days.

† Five international quiet days.

JANUARY, 1914.

2° WEST PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
										<i>h</i>	<i>m</i>		<i>h</i>	<i>m</i>			
56.4	55.6	55.0	54.8	54.7	54.7	54.7	54.8	55.0	55.3	15	00	56.6	11	25	54.1	2.5	1
55.3	54.9	54.6	54.6	54.6	54.6	54.8	54.9	55.1	54.8	2	12	55.6	10	35	53.5	2.1	2
55.6	55.2	54.7	54.7	54.7	54.6	54.7	54.9	55.3	54.9	13	00	56.3	9	10	53.3	3.0	3
55.9	54.9	54.8	54.8	54.5	53.8	54.6	54.7	54.7	54.9	14	00	57.4	10	00	52.6	4.8	4
56.4	55.8	55.1	55.1	54.7	54.7	54.8	54.9	54.9	55.2	13	45	57.4	9	30	52.7	4.7	5
56.0	55.7	55.7	55.6	55.2	55.1	55.0	54.9	54.8	55.2	13	30	56.8	10	00	53.7	3.1	6
55.7	55.0	55.4	55.5	55.2	55.1	55.1	55.0	55.1	55.1	15	30	56.9	10	00	53.8	3.1	7
55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.0	15	10	55.4	10	18	52.2	4.2	8
55.4	56.1	55.5	55.5	55.5	55.5	55.4	55.4	55.4	55.2	16	00	56.4	10	30	52.7	3.7	9
56.4	55.0	54.9	55.0	55.0	54.9	54.8	54.7	54.7	55.2	14	00	56.9	10	00	52.5	4.4	10
55.5	55.4	55.5	55.5	55.2	54.8	55.1	55.5	55.2	55.1	14	00	56.9	10	00	52.4	4.5	11
55.2	54.7	54.8	55.3	55.1	54.9	55.0	55.2	55.1	54.9	14	00	55.6	9	40	52.4	3.2	12
54.9	54.6	54.8	54.8	54.7	54.8	54.9	54.9	54.9	54.9	12	15	56.7	9	30	52.1	4.6	13
54.5	54.5	55.0	54.9	54.9	55.0	55.0	55.0	55.2	55.1	13	20	57.0	9	35	53.2	3.8	14
55.3	55.6	55.6	55.8	55.5	54.8	54.9	55.1	55.2	55.6	13	00	57.6	9	00	53.9	3.7	15
54.4	54.3	54.8	54.3	54.2	54.2	54.2	54.2	54.3	54.7	1	50	58.2	8	45	53.3	2.9	16
54.9	54.3	54.9	54.9	55.1	54.9	54.7	54.7	55.0	54.8	13	00	55.3	10	00	53.2	3.1	17
55.1	55.2	55.2	55.1	55.1	55.1	55.1	55.2	55.2	55.5	13	20	57.1	8	30	54.9	2.2	18
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20
56.0	55.0	55.0	55.1	55.1	55.1	55.5	54.1	55.9	55.7	7	20	56.7	22	43	53.9	2.8	21
56.2	55.1	55.1	55.0	55.7	55.8	55.8	55.5	55.0	55.6	3	45	57.0	10	00	53.1	3.9	22
55.1	55.1	55.0	55.0	55.0	55.0	55.0	55.1	55.1	55.9	5	00	56.2	10	00	54.2	2.0	23
55.1	55.0	55.0	55.0	55.0	55.0	55.1	55.1	55.2	55.1	0	00	55.1	10	00	53.7	2.4	24
55.0	55.6	55.7	55.5	55.4	55.3	55.4	55.5	55.6	55.5	12	00	56.0	10	00	54.9	1.1	25
54.9	54.9	54.9	54.9	55.0	55.0	55.2	55.4	55.4	55.2	4	30	55.9	11	00	54.7	1.2	26
55.7	55.5	55.6	55.6	55.6	55.6	55.6	55.8	55.9	55.7	13	00	55.9	10	00	55.1	.8	27
55.1	55.3	55.2	55.0	55.0	55.2	55.4	55.7	55.8	55.4	3	00	55.9	10	00	54.8	1.1	28
55.8	55.7	55.8	55.8	55.8	55.8	55.8	55.7	55.6	55.9	13	00	55.8	6	00	55.5	1.3	29
55.8	55.9	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.7	13	00	56.0	9	00	55.1	.9	30
56.3	55.9	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.7	14	20	56.7	9	00	54.1	2.6	31
55.7	55.3	55.3	55.2	55.2	55.1	55.2	55.2	55.3	55.3							2.9	
55.8	55.4	55.3	55.3	55.2	55.2	55.2	55.4	55.4	55.4							2.5	
55.6	55.3	55.2	55.2	55.4	55.4	55.4	55.5	55.5	55.3								

FEBRUARY, 1914.

2° WEST PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
										<i>h</i>	<i>m</i>		<i>h</i>	<i>m</i>			
56.4	55.7	55.7	55.6	55.4	55.1	55.5	55.7	55.7	55.8	14	00	56.7	8	30	55.3	1.4	1
55.0	55.9	55.7	55.4	55.5	55.0	55.1	55.6	55.7	55.5	15	00	55.8	9	00	53.8	3.0	2
55.5	55.8	55.7	55.9	55.7	55.7	55.7	55.7	55.7	55.8	17	00	56.8	11	00	54.8	2.0	3
56.5	55.3	55.8	55.7	55.7	55.5	55.5	55.6	55.1	55.8	15	00	55.5	10	00	54.7	1.8	4
(56.4)	56.2	55.6	55.5	55.5	55.5	55.4	55.3	55.5	55.6	15	00	56.6	10	00	54.4	2.2	5
55.5	56.6	56.3	56.0	55.6	55.5	55.5	55.5	55.5	55.9	13	30	57.5	5	00	54.7	2.8	6
57.1	56.8	55.8	56.3	56.0	55.7	55.8	55.8	55.6	55.0	15	00	57.4	10	30	55.0	2.4	7
55.5	56.5	56.5	56.2	55.9	56.0	55.9	56.1	56.4	55.9	15	00	56.5	10	00	54.6	1.9	8
56.5	55.8	55.5	55.6	55.6	55.6	55.9	56.3	56.5	55.9	15	00	56.5	9	45	54.7	1.8	9
57.5	57.0	56.6	56.4	56.3	55.9	56.1	55.5	56.6	56.3	16	00	57.5	10	15	54.8	2.7	10
56.7	56.7	56.7	56.6	56.5	56.0	55.9	56.3	56.5	55.3	7	18	57.3	10	22	55.3	2.0	11
56.7	56.6	56.5	55.9	55.6	55.8	55.8	56.3	56.5	56.4	15	00	56.9	19	45	55.5	1.4	12
56.4	55.8	56.0	55.7	55.7	55.8	55.7	56.1	55.5	56.3	13	50	57.3	9	05	55.5	1.8	13
57.7	56.9	56.7	56.4	56.2	55.8	55.8	55.7	55.8	56.6	16	00	57.7	23	00	55.7	2.0	14
56.8	57.7	57.4	55.7	55.6	56.4	56.3	56.4	55.5	56.4	17	30	57.7	10	05	54.8	2.9	15
57.0	57.2	56.9	56.7	56.5	56.4	56.2	56.4	56.5	56.5	17	00	57.2	10	00	55.8	1.4	16
57.1	57.8	57.7	57.2	56.8	56.5	55.7	56.1	56.4	56.4	17	18	57.9	14	00	54.9	3.0	17
57.1	57.9	57.8	57.0	56.8	56.7	56.8	56.8	56.6	56.5	17	00	57.9	10	45	54.8	3.1	18
56.9	57.8	57.2	55.8	56.7	56.4	56.5	56.7	56.8	56.8	8	00	57.8	14	00	55.8	2.0	19
56.6	57.0	57.2	56.8	56.8	55.8	56.8	56.8	55.8	56.6	18	06	57.3	14	00	54.9	2.4	20
56.3	57.0	57.1	56.8	56.8	56.8	56.8	56.8	56.8	56.7	8	00	57.3	14	00	55.7	1.6	21
57.6	58.0	57.9	57.4	57.1	57.0	56.9	57.0	57.0	57.2	7	16	58.0	0	00	56.8	1.2	22
55.8	56.0	56.7	56.7	56.6	56.8	56.9	56.9	56.9	56.5	8	18	57.3	14	00	55.0	2.3	23
56.2	56.8	57.1	56.9	56.9	56.9	56.9	56.9	56.9	56.9	11	30	57.8	15	00	56.0	1.8	24
56.9	56.9	55.9	56.9	56.7	56.8	56.8	56.8	56.9	56.8	13	00	57.4	8	00	56.2	1.2	25
57.2	57.2	57.0	56.7	56.2	56.2	56.2	56.2	56.6	57.2	12	45	58.8	21	15	56.1	2.7	26
57.9	57.2	57.2	56.6	56.2	56.1	56.2	56.3	56.5	55.9	13	15	59.0	9	00	55.5	3.5	27
57.8	57.4	57.4	57.3	56.6	56.4	56.2	56.2	56.1	56.6	14	20	58.2	9	25	53.9	4.3	28
56.8	56.8	56.7	56.4	56.2	56.1	56.1	56.3	56.4	56.4							2.2	
55.9	56.7	56.6	56.3	56.3	56.0	56.1	56.4	56.5	56.4							2.0	
55.8	56.7	56.6	56.5	56.3	56.2	56.3	56.5	56.5	56.4								

MARCH, 1914.

2° WEST PLUS TABULAR QUANTITIES.

Day	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h
1	56.1	56.1	56.1	56.0	56.2	56.0	56.1	56.4	55.2	55.8	56.5	57.3	57.2	57.9	58.0
2	56.7	57.0	56.9	57.2	56.2	56.5	56.8	56.3	56.5	56.7	56.9	57.1	57.0	56.8	56.6
3	56.0	55.9	56.2	56.1	56.1	56.1	56.3	57.0	57.7	57.9	58.2	58.1	57.5	57.2	57.2
4	56.8	57.0	56.4	56.8	56.2	56.4	56.2	56.2	56.1	56.1	56.1	57.2	57.3	57.5	58.2
5†	56.7	56.8	56.9	57.0	57.1	57.1	57.2	57.2	57.0	56.5	56.1	56.2	56.1	56.3	57.3
6	56.3	56.9	56.3	56.2	56.3	55.9	56.9	57.2	56.1	55.8	55.8	56.1	55.8	57.3	57.4
7	56.9	56.6	57.3	57.2	56.9	57.0	57.2	57.0	57.0	56.7	56.6	56.3	56.2	56.1	56.5
8*	56.9	57.1	56.9	57.4	57.3	56.8	56.9	55.8	55.1	54.9	55.2	56.2	56.4	57.3	57.4
9	57.1	57.1	56.7	57.0	56.5	56.9	57.4	57.5	58.5	57.5	57.3	57.4	57.3	57.4	57.3
10*	57.3	57.1	57.1	57.0	56.8	56.8	56.4	55.8	56.1	57.3	58.3	58.3	58.3	58.3	58.2
11	57.3	56.8	56.6	56.6	56.3	56.2	57.3	57.3	56.2	55.4	56.2	56.8	57.3	57.5	58.2
12	57.3	57.3	56.9	56.9	56.9	56.2	56.3	55.9	55.4	55.9	56.8	57.6	58.4	59.0	58.3
13*	57.5	57.4	57.3	56.7	57.0	58.4	56.2	55.2	54.4	55.0	55.8	57.1	58.8	59.8	60.1
14	57.2	57.2	57.1	56.6	56.3	56.4	56.4	55.2	54.6	54.4	55.1	55.9	57.4	58.6	59.3
15	57.0	57.4	57.4	57.3	57.3	57.0	56.4	55.4	55.4	55.2	54.7	56.1	58.4	60.2	60.0
16	57.4	57.6	58.0	57.6	57.5	57.4	56.6	55.8	55.4	55.3	55.6	56.7	58.4	59.4	59.5
17	57.6	57.6	57.6	57.5	57.5	57.0	56.9	56.3	55.7	56.1	56.4	57.2	58.0	58.8	59.5
18	57.4	57.4	57.6	57.6	57.6	57.5	56.6	55.7	55.4	55.7	56.0	56.2	56.5	57.8	58.8
19	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.0	56.3	56.0	56.1	56.2	57.1	58.4	58.4
20*	57.2	57.1	57.4	57.2	57.2	57.0	57.4	57.3	56.5	56.7	56.5	56.4	57.0	58.1	58.1
21*	57.4	57.4	57.3	57.2	57.1	57.0	56.5	57.2	57.4	57.6	57.4	56.9	57.4	58.4	58.7
22*†	57.6	57.5	57.4	57.1	57.4	56.8	56.2	56.0	56.6	57.1	57.6	58.2	59.1	60.2	60.1
23*	57.5	58.2	57.5	57.1	56.9	56.4	56.1	55.5	55.1	55.0	55.6	56.9	58.4	59.3	58.9
24	57.7	57.6	57.5	57.3	57.2	56.9	56.7	56.6	57.2	57.7	57.5	57.8	59.4	59.7	59.4
25	58.0	57.8	57.5	57.5	57.4	56.7	56.4	56.3	57.1	57.3	58.2	59.1	59.5	60.0	59.6
26	57.1	57.3	57.2	56.7	56.7	56.8	56.1	56.6	56.8	57.2	57.8	58.4	59.4	59.3	58.7
27	57.5	57.6	57.5	57.3	57.2	57.0	56.5	56.8	57.7	58.5	59.5	60.4	61.2	61.2	60.2
28*†	57.6	57.6	57.5	57.5	57.4	57.2	56.3	54.5	54.0	54.2	55.1	56.4	58.5	59.8	60.1
29*†	57.6	57.5	57.5	57.4	57.4	57.3	56.2	55.3	55.3	56.4	56.7	57.8	59.6	61.2	60.7
30*†	57.6	57.6	57.6	57.5	57.3	56.9	56.1	55.3	54.6	54.6	54.4	57.5	60.6	60.6	60.7
31	57.6	57.5	57.6	57.5	57.3	57.5	56.4	55.5	55.5	55.5	56.5	58.6	59.5	61.5	61.3
Mean.....	57.2	57.2	57.2	57.1	57.0	56.9	56.6	56.2	56.1	56.2	56.5	57.2	58.0	58.7	58.8
Mean*.....	57.4	57.4	57.4	57.2	57.2	57.1	56.4	55.8	55.5	55.9	56.3	57.2	58.3	59.3	59.3
Mean†.....	57.4	57.4	57.4	57.3	57.3	57.1	56.4	55.7	55.5	55.8	56.0	57.2	58.6	59.6	59.8

APRIL, 1914.

2° WEST PLUS TABULAR QUANTITIES.

1	57.7	57.7	57.9	57.7	57.6	57.2	57.4	55.7	56.4	56.3	56.7	58.8	60.7	61.7	61.5
2	57.9	57.9	57.7	57.7	57.6	57.4	56.6	56.7	56.6	57.6	57.7	58.0	59.4	60.4	60.5
3	58.1	57.8	57.7	57.6	57.3	56.7	55.5	55.6	56.9	57.1	57.3	58.4	59.4	60.4	60.6
4*	57.8	57.8	57.6	57.7	57.6	57.1	56.3	56.3	56.2	55.8	55.7	56.5	58.4	58.8	59.2
5	57.9	57.7	57.7	57.4	57.3	57.3	56.7	56.9	58.1	57.8	57.6	58.1	59.2	59.9	60.6
6	58.2	59.3	58.6	61.7	59.8	58.6	55.9	54.5	55.7	56.5	58.0	59.6	60.1	60.1	58.7
7	58.3	58.3	58.5	57.9	57.8	57.8	56.9	57.3	57.2	57.3	56.8	57.3	57.9	58.3	58.3
8	57.4	57.7	57.2	58.4	56.6	56.2	55.9	56.6	56.9	57.4	57.8	59.2	61.1	61.5	61.2
9	58.2	58.1	57.5	57.4	57.2	56.6	55.7	55.7	56.2	56.8	57.4	58.5	59.0	60.1	59.7
10	58.4	58.3	58.7	58.3	58.4	57.3	56.3	55.4	55.5	55.5	56.7	58.7	59.9	60.8	60.5
11	58.5	58.6	57.9	57.7	56.9	56.8	55.9	55.3	55.1	54.8	55.6	57.1	59.0	60.2	60.8
12†	58.1	57.8	57.7	57.7	57.4	56.8	55.8	55.2	55.6	55.6	55.5	56.0	57.4	57.9	58.7
13*	58.3	58.5	58.0	57.9	57.9	57.7	56.9	56.4	56.3	56.0	56.2	57.5	58.7	59.6	60.0
14*	58.5	58.3	58.3	58.3	58.1	58.0	57.0	56.6	56.4	56.4	56.8	58.7	60.3	60.8	60.9
15†	58.4	58.2	58.2	58.3	58.0	57.8	57.0	56.9	57.6	57.6	57.9	58.4	58.8	59.1	59.8
16	57.8	58.5	57.4	57.5	57.5	56.9	56.4	57.5	58.5	58.6	58.8	59.1	59.3	59.7	59.8
17	57.9	58.0	58.0	58.0	57.9	57.8	57.2	57.4	57.4	57.1	56.9	57.9	58.8	59.6	59.5
18	58.6	58.4	58.5	58.2	57.8	57.5	56.7	56.6	57.0	57.3	57.6	57.9	59.0	59.9	59.9
19	59.1	57.6	57.5	57.5	57.5	57.4	56.9	57.5	58.5	58.1	58.6	58.9	59.8	60.2	60.4
20*	58.7	58.6	58.4	58.3	58.0	57.8	57.0	57.5	59.2	60.0	60.0	60.6	61.4	61.4	61.0
21*	58.0	57.6	57.8	57.8	57.0	57.1	55.7	56.5	56.7	57.5	57.6	57.8	58.5	59.6	60.5
22*	58.4	58.4	58.2	58.0	58.0	57.5	56.1	56.6	57.5	58.5	59.7	60.6	61.0	61.0	60.7
23	58.8	58.7	58.2	58.1	57.9	57.0	55.8	56.9	58.3	59.3	60.1	60.8	61.0	61.4	61.9
24	58.8	58.8	58.6	57.9	57.9	56.8	55.5	55.8	57.2	58.3	59.7	60.6	61.4	62.2	61.3
25*	58.7	58.3	58.0	58.0	57.9	57.0	56.1	56.5	56.8	57.5	59.0	60.2	60.9	61.1	61.0
26*†	(58.7)	(58.6)	(58.4)	(58.2)	(57.9)	(57.1)	(55.8)	(55.4)	55.1	56.0	57.6	59.7	60.7	61.2	61.2
27	58.6	58.6	58.3	58.0	57.9	57.2	55.6	55.0	55.4	56.0	57.0	58.7	61.0	62.2	62.6
28	58.7	58.6	58.5	58.0	57.9	57.0	56.1	56.8	56.6	56.7	57.6	58.8	60.1	60.9	60.7
29*†	58.6	58.7	58.7	58.2	58.3	57.9	57.3	57.6	57.1	56.9	58.2	59.7	60.9	61.5	61.1
30*†	58.6	58.3	58.5	58.6	58.2	57.6	56.2	55.8	55.6	55.7	56.8	58.6	59.6	60.1	60.2
Mean.....	58.3	58.3	58.1	58.1	57.8	57.3	56.3	56.4	56.8	57.1	57.6	58.7	59.8	60.4	60.4
Mean*.....	58.4	58.3	58.2	58.1	57.9	57.5	56.4	56.5	56.7	57.0	57.8	59.0	60.0	60.5	60.6
Mean†.....	58.5	58.3	58.3	58.2	58.0	57.4	56.4	56.2	56.2	56.4	57.2	58.5	59.5	60.0	60.2

* Ten least disturbed days.

† Five international quiet days.

HOURLY VALUES OF DECLINATION.

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MARCH, 1914.

2° WEST PLUS TABULAR QUANTITIES.

16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean	Maximum		Minimum		Range	Day
										h	m	h	m		
58.2	57.5	57.4	56.9	57.0	55.9	56.1	56.4	56.7	56.6	16	00	58.2	21 30	54.3	3.9
56.6	57.4	58.1	57.5	57.3	56.9	57.2	56.2	55.8	56.8	3	40	62.7	23 48	56.0	6.7
57.3	57.2	57.4	57.3	57.2	56.9	56.8	56.1	56.8	56.9	11	00	58.2	0 08	55.1	3.1
58.3	58.2	57.2	57.2	57.2	57.0	56.1	56.3	56.5	56.9	16	00	58.3	10 00	56.1	2.2
57.5	57.9	58.1	57.3	57.2	57.2	57.0	56.6	56.0	56.9	18	00	58.1	23 52	55.8	2.3
57.8	57.9	58.1	57.3	56.3	56.1	57.2	57.2	56.8	56.7	17	45	58.4	10 00	55.8	2.6
57.3	58.2	58.2	57.3	57.5	57.2	56.7	56.5	56.5	57.0	18	00	58.2	14 00	56.1	2.1
58.2	58.5	58.3	57.4	57.4	57.3	57.3	57.3	56.9	56.9	17	12	58.6	10 30	54.6	4.0
57.1	57.4	57.7	57.3	57.1	57.3	57.3	57.3	57.1	57.3	8	55	58.6	4 50	56.4	2.2
57.5	57.4	57.8	57.4	57.3	57.3	57.3	57.3	57.0	57.3	11	30	58.6	8 45	55.5	3.1
58.0	57.4	57.7	57.4	57.3	57.3	56.9	56.9	57.1	57.0	15	40	58.3	10 00	55.4	2.9
57.7	57.4	57.4	57.3	57.3	57.3	57.3	57.3	57.3	57.1	14	05	59.1	9 00	55.4	3.7
59.0	58.2	57.6	57.4	57.3	57.3	57.3	57.3	57.3	57.3	14	40	60.2	9 00	54.4	5.8
58.7	58.2	57.5	57.3	56.8	57.1	57.1	56.5	56.9	56.8	15	00	59.2	9 17	54.2	5.1
59.3	58.3	58.2	57.7	57.3	56.4	57.0	57.1	57.4	57.2	14	25	60.5	11 04	54.6	5.9
59.4	59.4	58.5	57.7	57.6	57.5	57.5	57.5	57.5	57.5	15	00	59.5	10 00	55.3	4.2
60.1	59.1	58.5	57.7	57.2	56.8	57.5	57.5	57.5	57.5	15	57	60.2	22 00	55.4	4.8
59.3	58.6	58.2	57.6	57.5	57.5	57.5	57.5	57.5	57.3	16	00	59.3	8 27	55.3	4.0
58.4	58.4	58.1	57.8	57.6	57.5	57.5	57.5	57.5	57.4	14	00	58.4	10 22	55.8	2.6
57.9	57.7	57.9	57.6	57.7	57.7	57.6	57.6	57.6	57.4	14	10	58.2	12 15	56.3	1.9
58.1	58.1	58.1	57.9	57.9	57.7	57.6	57.6	57.6	57.6	14	40	58.9	7 00	56.5	2.4
59.2	58.4	58.2	57.7	57.8	57.9	57.8	57.8	57.8	57.8	14	00	60.2	8 00	56.0	4.2
58.4	58.2	57.8	57.7	57.6	57.6	57.7	57.7	57.7	57.3	13	52	59.4	9 37	54.9	4.5
58.5	58.3	58.5	58.2	57.2	57.3	56.5	58.0	57.8	57.8	13	50	59.8	7 38	56.2	3.6
58.7	58.4	58.1	58.0	57.6	57.8	57.9	57.6	57.0	57.9	14	22	60.1	7 17	55.9	4.2
58.7	58.4	58.4	56.6	57.6	57.5	57.5	56.6	56.9	57.5	13	45	59.5	7 00	56.1	3.4
59.4	58.6	58.3	57.8	57.6	57.6	57.4	57.5	57.6	58.2	13	25	61.4	7 03	56.4	5.0
59.5	58.5	58.2	57.9	57.6	57.6	57.6	57.6	57.6	57.3	14	35	60.3	9 00	54.0	6.3
59.5	58.5	57.9	57.6	57.6	57.6	57.6	57.6	57.6	57.7	14	20	61.3	8 40	55.1	6.2
60.1	58.7	58.3	58.3	58.0	57.7	57.6	57.6	57.6	57.6	14	28	60.7	10 18	54.4	6.3
59.8	58.7	58.3	57.8	57.8	57.7	57.6	57.1	57.5	57.9	14	00	61.5	8 25	55.4	6.1
58.5	58.2	58.0	57.5	57.4	57.3	57.2	57.2	57.2	57.3						4.0
58.7	58.2	58.0	57.7	57.6	57.6	57.5	57.5	57.5	57.4						4.5
59.2	58.4	58.1	57.8	57.6	57.5	57.3	57.3	57.4	57.5						

APRIL, 1914.

2° WEST PLUS TABULAR QUANTITIES.

16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean	Maximum		Minimum		Range	Day
										h	m	h	m		
60.7	59.8	59.2	58.5	58.4	58.1	57.8	57.6	57.9	58.3	14	00	61.7	8 00	55.7	6.0
59.9	59.3	58.8	58.4	58.2	57.6	57.9	57.8	58.2	58.2	15	00	60.5	8 43	56.3	4.2
60.6	59.9	59.0	58.4	58.4	57.9	57.8	57.8	57.9	58.1	16	00	60.6	8 08	55.2	5.4
59.1	58.9	58.8	58.3	58.0	57.8	57.8	57.9	57.8	57.6	15	00	59.2	10 39	55.5	3.7
60.4	59.4	59.2	58.9	58.7	58.6	58.5	58.4	58.2	58.4	15	00	60.6	7 10	55.5	4.1
58.6	58.4	58.6	57.7	54.6	57.6	57.8	56.2	58.4	58.0	4	14	62.9	8 42	54.3	8.6
58.3	58.0	58.5	59.0	58.6	58.2	58.6	56.6	56.8	57.9	13	39	58.6	7 12	56.5	2.1
60.1	59.5	58.9	58.6	58.7	57.8	58.1	58.2	58.2	58.3	13	31	61.7	6 28	55.6	6.1
59.5	58.4	58.5	58.4	57.8	58.0	58.1	58.3	58.7	57.9	13	51	60.3	7 38	55.6	4.7
59.3	57.8	58.0	58.4	57.9	58.4	58.4	58.5	58.6	58.1	14	00	60.8	8 36	55.1	5.7
59.7	59.3	58.6	58.5	58.4	58.4	58.5	58.1	58.0	57.8	15	00	60.8	10 00	54.8	6.0
58.7	58.4	58.4	58.5	58.5	58.5	58.5	58.5	58.4	57.5	16	00	58.7	8 44	55.0	3.7
60.1	59.7	59.1	58.8	58.6	58.4	58.4	58.4	58.4	58.2	15	48	60.3	9 52	55.8	4.5
60.5	59.1	58.7	58.7	58.6	58.5	58.3	58.4	58.5	58.4	15	00	60.9	9 33	55.9	5.0
59.7	59.5	59.1	58.8	58.7	58.7	56.8	57.8	57.8	58.3	15	00	59.8	7 09	56.7	3.1
59.4	59.1	58.8	58.7	57.8	58.2	58.5	58.5	58.1	58.4	14	10	60.0	6 47	56.0	4.0
59.0	58.9	58.6	58.8	58.5	58.8	58.8	58.8	58.8	58.3	14	00	59.6	11 00	56.9	2.7
59.6	58.9	58.8	59.0	58.6	58.0	57.9	59.7	57.9	58.3	15	00	59.9	7 21	56.2	3.7
59.5	58.4	58.8	58.8	58.8	58.8	58.7	58.6	58.6	58.5	14	50	60.6	7 00	56.9	3.7
59.9	59.1	58.8	58.7	58.8	58.8	58.8	58.5	58.2	59.1	13	36	61.6	7 00	57.0	4.6
60.2	59.6	59.4	59.0	58.9	58.8	58.7	58.7	58.8	58.2	15	14	60.6	7 03	55.5	5.1
59.7	59.5	59.5	59.1	58.5	58.8	58.8	58.8	58.7	58.8	13	24	61.1	7 18	55.9	5.2
61.4	60.8	60.5	59.9	59.2	58.9	59.1	58.9	58.9	59.2	15	00	61.9	6 49	55.7	6.2
60.3	59.4	59.5	59.3	59.2	59.0	58.9	59.0	59.0	59.0	14	00	62.2	6 48	55.0	7.2
60.1	58.9	58.9	59.0	58.9	58.8	59.0	58.8	(58.6)	48.7	14	00	61.1	7 12	55.9	5.2
60.3	59.1	58.9	58.9	58.9	58.8	58.7	58.8	58.7	58.4	14	00	61.2	9 00	55.1	6.1
61.2	59.9	59.5	58.9	59.0	58.9	58.7	58.8	58.8	58.6	14	48	62.8	7 36	54.8	8.0
59.9	59.1	58.9	58.7	58.7	58.5	58.6	58.7	58.3	58.4	14	00	60.9	7 00	56.1	4.8
60.3	59.7	59.3	59.2	59.0	58.9	58.9	58.9	58.3	58.9	14	00	61.5	10 00	56.9	4.6
60.0	59.3	59.2	59.1	59.1	59.1	59.3	59.1	59.1	58.4	15	00	60.2	9 36	55.4	4.8
59.9	59.2	59.0	58.8	58.5	58.5	58.4	58.4	58.4	58.3						5.0
60.0	59.3	59.1	58.9	58.7	58.7	58.7	58.6	58.5	58.5						4.9
59.8	59.2	59.0	58.9	58.7	58.6	58.7	58.6	58.3	58.3						

MAY, 1914.

2° WEST PLUS TABULAR QUANTITIES.

Day	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h
1	58.9	58.8	58.7	58.6	58.5	58.1	57.1	57.1	57.8	57.8	59.1	59.7	60.3	60.5	59.7
2	58.3	58.4	58.5	58.5	57.9	56.7	56.0	57.5	58.6	59.3	59.7	60.6	60.6	60.8	60.4
3*	59.0	58.9	58.7	58.7	58.6	57.7	56.6	56.6	57.0	58.4	59.3	59.5	59.4	59.8	59.9
4*	58.9	58.8	58.7	58.6	58.6	58.3	57.3	58.1	59.2	59.4	59.4	59.3	59.6	59.8	60.5
5	59.0	58.7	58.5	58.5	58.1	56.8	55.2	55.5	56.4	57.5	58.2	59.1	59.7	60.6	61.2
6	59.2	58.8	58.6	58.4	58.5	57.3	54.7	54.8	55.5	56.8	57.2	59.1	61.2	61.3	61.2
7	58.4	58.4	58.6	58.4	58.3	57.0	56.1	55.8	56.3	58.1	59.9	60.4	60.3	60.1	59.5
8	59.2	59.2	58.9	58.3	58.2	57.1	55.6	55.9	57.0	59.2	61.0	62.1	62.3	61.7	61.3
9*†	59.3	59.2	59.0	58.9	58.5	57.6	56.0	55.4	56.1	58.1	59.5	60.5	61.1	61.2	60.6
10*†	59.5	59.4	59.2	59.0	58.7	57.2	55.4	54.3	55.2	58.2	60.2	61.4	62.2	62.1	61.2
11	59.2	59.1	59.0	58.4	58.1	57.0	55.4	53.9	54.8	55.8	58.1	59.3	61.5	62.0	61.4
12	59.4	59.1	59.1	59.1	58.9	58.6	57.2	56.0	56.0	56.4	57.5	59.4	60.9	61.1	61.2
13*	59.2	59.2	59.2	59.0	58.9	59.0	59.0	57.7	56.7	56.6	56.9	57.7	58.7	60.4	61.5
14*†	58.8	58.7	58.8	58.8	58.8	58.8	58.6	58.8	59.2	59.8	59.8	59.7	59.7	59.6	59.5
15	59.3	59.1	58.9	58.7	58.7	57.7	56.4	56.6	57.5	58.4	59.9	60.6	62.3	62.5	62.2
16	59.4	58.5	58.5	58.5	58.6	57.9	56.9	57.4	58.4	59.4	59.8	60.4	60.6	60.7	60.7
17	58.4	58.5	59.3	61.4	58.4	58.6	58.4	57.6	59.5	59.5	60.4	60.5	60.5	60.9	61.4
18	59.5	59.4	59.1	58.9	58.7	58.5	58.1	58.1	58.5	59.0	59.4	59.6	59.9	59.9	60.5
19†	58.9	58.8	58.6	58.6	58.6	58.5	58.5	58.4	58.4	58.7	59.4	59.9	60.4	60.6	60.5
20*†	59.6	59.5	59.3	59.3	59.1	58.3	57.4	57.4	57.8	58.6	59.5	60.8	61.5	61.6	61.3
21	59.6	59.5	59.3	59.4	59.2	58.3	57.0	56.4	57.0	58.6	59.9	61.8	62.6	62.5	61.7
22*	59.8	59.7	59.6	59.5	59.2	57.7	56.3	55.3	55.5	56.8	58.7	59.6	60.5	60.8	61.3
23*	59.8	59.7	59.6	59.6	59.2	58.7	57.9	57.6	57.8	58.4	58.9	59.8	60.8	61.6	61.6
24	60.4	59.9	60.4	60.2	59.4	58.6	57.6	57.5	57.9	58.6	59.3	59.7	59.6	59.9	60.6
25	60.1	59.9	59.8	59.6	59.3	58.7	57.1	56.4	57.8	59.4	60.6	61.6	61.9	61.6	61.4
26	60.0	59.7	59.3	58.7	58.6	57.5	56.8	56.8	58.6	60.6	61.9	63.2	63.2	63.1	62.5
27	59.9	59.9	59.7	59.6	59.3	58.5	57.4	57.5	58.3	59.7	61.5	62.4	62.5	61.9	61.8
28	60.4	59.9	59.6	59.6	58.9	58.4	57.6	57.9	58.8	60.4	60.8	60.8	59.9	60.5	61.3
29	60.3	60.4	60.4	60.2	60.4	59.5	58.2	57.0	57.4	57.6	58.4	59.3	59.8	61.3	61.7
30*	60.3	60.2	59.9	59.9	60.1	59.8	59.3	58.4	58.8	59.3	59.4	59.6	59.9	60.5	60.8
31	59.6	59.5	59.2	58.9	58.7	57.5	56.6	56.4	57.5	57.8	59.3	60.9	61.6	62.6	62.4
Mean.....	59.4	59.3	59.2	59.1	58.8	58.1	57.0	56.8	57.5	58.5	59.4	60.3	60.8	61.1	61.1
Mean*.....	59.4	59.3	59.2	59.1	59.0	58.3	57.4	57.0	57.3	58.4	59.2	59.8	60.3	60.7	60.8
Mean†.....	59.2	59.1	59.0	58.9	58.7	58.1	57.2	56.9	57.3	58.7	59.7	60.5	61.0	61.0	60.6

JUNE, 1914.

2° WEST PLUS TABULAR QUANTITIES.

1	58.9	59.4	59.6	58.7	59.7	57.9	56.6	56.3	57.6	58.3	59.6	60.9	61.7	61.6	61.2
2	59.6	59.5	59.4	59.1	58.9	58.0	56.4	56.4	57.7	59.2	60.5	61.5	62.5	62.7	62.4
3	60.2	59.2	60.0	59.8	59.8	59.6	57.8	57.5	58.4	59.5	60.5	61.5	61.6	61.5	61.2
4	59.6	59.5	59.4	59.0	59.3	58.5	58.3	58.5	58.9	59.3	59.6	60.6	62.8	64.4	63.5
5	59.8	59.5	59.4	59.7	59.3	58.3	57.1	56.6	57.5	58.6	59.4	60.5	61.6	62.4	62.4
6	59.6	59.5	59.3	59.3	59.0	58.3	56.6	55.8	55.7	56.6	57.9	59.6	60.9	61.7	61.7
7	(60.2)	(60.0)	(59.8)	(59.6)	(59.4)	(58.6)	(57.5)	(57.1)	(57.5)	(58.5)	(59.6)	60.5	60.9	60.9	60.8
8	59.6	59.5	60.0	59.4	58.9	58.5	57.4	56.4	58.2	60.5	60.8	61.6	61.5	61.8	61.3
9*	60.3	60.1	60.5	59.7	59.6	59.4	57.7	56.7	57.3	58.3	60.1	60.5	60.9	60.6	61.7
10	60.3	60.3	59.8	59.7	59.6	59.0	57.9	57.0	57.4	58.2	59.7	60.4	61.3	62.3	61.9
11*	60.1	60.2	60.3	59.9	59.7	58.8	57.9	57.7	57.7	57.8	57.6	58.6	59.5	60.4	61.4
12*†	60.4	60.4	60.0	59.8	59.7	59.0	58.0	57.5	57.9	58.9	59.7	61.3	61.5	62.0	62.5
13*†	60.0	60.0	60.1	59.9	59.7	58.6	57.0	56.4	57.3	58.4	59.1	60.3	61.0	61.7	60.8
14	60.3	60.3	60.0	59.7	59.6	58.8	58.1	58.0	58.4	58.6	58.8	59.7	60.4	60.9	61.1
15*	60.0	60.0	59.7	59.6	59.0	57.7	56.8	56.6	57.6	58.6	60.2	60.5	60.3	60.7	60.7
16*†	59.8	59.7	59.6	59.5	59.3	58.9	58.3	58.1	58.5	59.4	59.6	60.1	60.2	59.8	60.2
17*†	60.4	59.9	59.7	59.5	59.4	58.4	56.4	56.7	58.4	59.7	61.0	61.5	61.3	60.7	60.5
18	60.4	60.0	59.8	59.7	59.6	58.0	57.6	57.8	58.6	59.3	59.6	59.0	58.3	58.6	58.9
19	59.5	59.6	59.6	59.6	59.4	58.6	57.6	58.4	59.8	60.7	61.7	62.8	62.7	62.3	62.0
20	59.8	59.4	59.5	59.6	59.5	58.8	58.7	58.5	59.0	59.9	61.2	61.0	61.6	62.4	61.8
21*	60.4	60.3	60.3	60.1	60.0	58.9	57.2	58.2	56.6	58.0	60.4	61.2	61.7	62.7	62.8
22*	60.4	60.3	60.3	59.9	59.7	58.7	57.3	56.3	56.9	58.6	60.6	62.6	63.8	63.8	63.4
23*†	60.5	60.4	60.3	60.2	59.8	58.5	57.3	56.5	57.5	58.4	59.7	60.3	60.8	61.4	61.3
24	60.5	60.5	60.4	60.2	59.7	57.5	56.5	55.4	56.1	57.8	60.3	62.4	63.3	63.7	63.5
25	60.7	59.9	59.7	59.6	59.7	59.3	57.6	57.2	56.5	58.5	61.4	62.5	62.6	62.7	62.5
26	60.3	60.3	60.1	59.7	59.7	58.2	56.7	56.2	57.2	59.6	61.8	62.5	62.7	63.5	63.3
27	59.6	60.6	60.1	59.3	58.8	57.3	57.2	56.3	57.6	59.8	61.6	62.1	61.5	62.4	62.5
28	60.4	60.3	59.8	60.4	59.5	58.9	58.2	57.6	57.2	57.5	58.8	60.3	61.5	62.3	62.9
29	60.6	60.6	60.7	61.2	60.4	59.4	58.2	58.3	58.7	59.6	60.8	61.9	62.7	63.1	62.4
30	61.5	60.9	60.3	60.2	59.8	58.7	57.6	57.6	59.2	59.6	60.6	61.7	62.3	62.9	63.2
Mean.....	60.1	60.0	59.9	59.7	59.5	58.6	57.4	57.1	57.8	58.9	60.1	61.0	61.5	61.9	61.9
Mean*.....	60.2	60.1	60.1	59.8	59.6	58.7	57.4	57.1	57.6	58.6	59.8	60.7	61.1	61.4	61.5
Mean†.....	60.2	60.1	59.9	59.8	59.6	58.7	57.4	57.0	57.9	59.0	59.8	60.7	61.0	61.1	61.1

* Ten least disturbed days.

† Five international quiet days.

HOURLY VALUES OF DECLINATION.

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MAY, 1914.

2° WEST PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
										<i>h</i>	<i>m</i>		<i>h</i>	<i>m</i>			
59.1	58.9	59.2	59.5	59.5	59.2	58.9	59.0	58.8	58.9	13	43	60.6	7	29	56.7	3.9	1
59.4	59.4	59.7	59.7	59.7	59.7	59.6	59.4	59.2	59.1	14	18	60.9	6	39	55.9	5.0	2
60.2	60.3	60.0	59.7	59.7	59.6	59.5	59.4	59.4	59.0	16	15	60.4	7	28	56.4	4.0	3
61.0	60.9	60.6	59.9	59.7	59.8	59.6	59.5	59.3	59.4	16	00	61.0	7	00	57.3	3.7	4
60.8	60.6	60.3	59.7	59.6	59.6	59.6	59.5	59.3	58.8	15	00	61.2	7	37	55.0	6.2	5
61.0	60.5	60.4	60.2	59.7	59.5	59.2	58.9	58.5	58.8	13	51	61.6	7	33	54.5	7.1	6
59.0	56.8	59.2	59.5	59.5	59.4	59.4	59.4	59.5	58.6	12	00	60.4	7	21	55.6	4.8	7
60.3	59.7	59.7	60.1	59.6	59.5	59.4	59.4	59.4	59.3	13	00	62.3	7	37	55.4	6.9	8
59.5	58.9	58.9	59.4	59.6	59.7	59.7	59.7	59.7	59.0	14	00	61.2	8	00	55.4	5.8	9
60.4	59.9	59.9	60.0	59.6	59.5	59.4	59.4	59.3	59.2	13	00	62.2	8	00	54.3	7.9	10
59.9	59.0	59.8	60.0	60.1	60.0	59.7	59.6	59.7	58.8	13	59	62.1	8	00	53.9	8.2	11
60.8	59.8	59.7	59.9	59.8	59.7	59.4	59.2	59.2	59.1	15	00	61.2	8	49	55.9	5.3	12
60.8	60.2	59.8	59.7	59.7	59.6	59.4	58.9	58.8	59.0	15	15	61.6	9	45	56.3	5.3	13
59.3	59.5	59.7	59.8	59.7	59.7	59.5	59.5	59.4	59.3	11	20	59.9	7	10	58.4	1.5	14
61.6	60.9	60.5	59.4	59.3	59.2	59.1	59.0	59.0	59.4	14	00	62.5	7	06	55.9	6.6	15
60.5	60.2	60.0	60.0	59.9	59.7	59.6	58.7	58.7	59.3	14	57	60.8	7	33	56.7	4.1	16
60.8	60.5	60.7	60.7	60.4	59.9	59.7	59.1	59.6	59.8	14	46	61.5	7	33	57.1	4.4	17
60.8	60.5	60.4	60.4	60.4	60.1	59.6	59.6	59.4	59.5	16	00	60.8	7	25	57.7	3.1	18
60.4	60.0	60.3	60.3	60.0	59.9	59.5	59.5	59.5	59.4	14	00	60.6	8	39	57.9	2.7	19
60.6	60.1	60.2	60.2	59.8	59.9	59.7	59.6	59.5	59.6	14	00	61.6	7	45	57.1	4.5	20
60.8	59.9	60.0	59.9	60.0	59.9	59.8	60.1	59.9	59.7	13	00	62.6	7	48	56.4	6.2	21
61.1	60.5	60.0	59.8	59.6	59.6	59.8	59.7	59.8	59.2	15	00	61.3	8	21	55.2	6.1	22
60.9	60.6	60.6	60.3	60.4	60.3	59.9	60.3	60.5	59.8	15	00	61.6	8	00	57.6	4.0	23
60.5	60.4	60.8	60.5	60.6	60.6	60.4	60.5	60.4	59.8	15	00	60.6	8	19	57.4	3.2	24
60.9	60.6	60.8	60.6	60.6	60.6	60.6	60.4	60.4	60.0	12	54	62.0	7	47	56.2	5.8	25
61.7	61.2	60.5	60.9	60.6	60.5	60.5	60.3	59.9	60.3	13	00	63.2	7	34	55.6	7.6	26
60.9	60.6	60.5	60.5	60.5	60.4	60.4	60.4	60.4	60.2	13	00	62.5	7	32	57.3	5.2	27
61.6	60.9	60.4	60.4	60.4	60.4	60.5	60.4	60.3	60.0	16	00	61.6	7	04	57.5	4.1	28
61.5	60.7	60.6	60.6	60.6	60.5	60.4	60.4	60.4	59.9	15	00	61.7	7	23	56.6	5.1	29
61.4	61.3	60.9	60.4	60.3	60.2	59.8	59.7	59.6	60.0	16	00	61.4	8	00	58.4	3.0	30
61.6	61.4	60.4	59.9	58.6	57.3	53.0	57.6	58.4	59.0	14	07	62.7	21	46	51.2	11.5	31
60.6	60.1	60.1	60.1	59.9	59.8	59.8	59.5	59.6	59.4							5.2	
60.5	60.2	60.1	59.9	59.8	59.8	59.6	59.6	59.5	59.3							4.6	
60.0	59.7	59.8	59.9	59.9	59.8	59.5	59.4	59.4	59.3								

JUNE, 1914.

2° WEST PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
										<i>h</i>	<i>m</i>		<i>h</i>	<i>m</i>			
60.6	60.6	60.8	60.4	60.4	60.3	59.9	59.8	59.7	59.6	13	00	61.7	8	00	56.3	5.4	1
61.5	60.6	60.4	60.6	60.6	60.5	59.8	59.6	59.4	59.9	14	00	62.7	7	13	55.9	6.8	2
60.3	60.4	60.7	60.6	60.5	59.9	59.8	59.8	59.8	60.0	13	00	61.6	8	00	57.5	4.1	3
62.2	60.8	(60.7)	(60.4)	(60.2)	(60.1)	(59.9)	59.7	59.6	60.2	14	00	64.4	6	35	58.0	6.4	4
61.5	60.6	60.6	59.8	60.1	59.7	59.7	59.5	59.6	59.7	14	28	62.4	8	17	56.4	6.0	5
61.4	60.9	60.7	60.6	60.5	60.5	60.4	60.4	(60.3)	(59.5)	14	45	61.8	8	27	55.5	6.3	6
60.6	60.6	60.6	60.7	60.6	60.3	60.3	59.4	59.4	59.7	12	50	61.0	8	00	57.1	3.9	7
60.4	59.7	59.7	60.3	60.3	60.3	62.3	59.9	59.8	59.8	13	54	61.8	8	00	56.4	5.4	8
61.6	60.6	60.6	60.6	60.6	60.4	60.4	60.4	60.4	60.0	15	00	61.7	8	00	56.7	5.0	9
61.6	60.9	60.5	59.8	59.9	59.7	59.4	59.7	63.6	59.9	14	00	62.3	8	18	56.6	5.7	10
60.7	60.7	60.6	60.3	60.3	60.3	59.8	60.0	60.3	59.6	15	25	61.4	8	21	57.5	3.9	11
61.6	60.5	60.5	60.5	60.2	60.2	60.3	59.8	59.9	60.1	15	00	62.5	8	00	57.5	5.0	12
60.6	60.2	60.3	60.5	60.5	60.5	60.4	60.3	60.3	59.7	14	00	61.7	7	35	56.3	5.4	13
60.6	59.8	60.4	60.7	60.5	60.4	60.4	60.3	60.3	59.8	15	00	61.1	7	54	57.4	3.7	14
60.5	60.5	60.6	60.6	60.7	60.6	60.2	60.0	59.9	59.6	14	00	60.7	7	53	56.5	4.2	15
60.4	60.7	60.8	60.7	60.8	60.6	60.5	60.4	60.4	59.8	18	00	60.8	8	11	57.7	3.1	16
60.6	60.7	60.9	60.7	60.9	60.7	60.5	60.5	60.4	60.0	12	00	61.5	7	18	56.3	5.2	17
59.6	60.3	60.8	60.8	60.7	60.8	60.7	60.4	60.4	59.6	18	00	60.8	7	37	57.3	3.5	18
62.0	61.4	61.4	60.7	60.8	61.1	60.6	60.4	60.1	60.5	12	00	62.8	7	00	57.6	5.2	19
61.2	60.5	50.6	60.7	60.7	60.5	60.5	60.5	60.4	60.3	14	14	62.4	6	45	57.6	4.8	20
62.5	61.7	60.8	60.9	60.5	60.6	60.4	60.3	59.9	60.3	14	49	62.8	8	30	56.2	6.6	21
62.4	61.3	60.5	60.5	60.5	60.5	60.5	60.5	60.4	60.4	13	47	64.0	8	00	56.3	7.7	22
61.3	61.3	61.3	60.9	60.5	60.3	60.4	60.4	60.4	60.0	13	49	61.5	7	51	56.4	5.1	23
62.7	62.3	61.5	61.2	61.1	60.7	60.7	60.7	60.6	60.4	14	27	63.8	8	00	55.4	8.4	24
61.8	61.3	61.2	60.7	60.7	60.5	60.5	60.4	60.4	60.3	13	42	62.8	9	07	55.8	7.0	25
62.8	62.4	62.5	60.6	60.3	60.0	59.5	59.5	59.8	60.4	14	00	63.5	7	48	55.8	7.7	26
62.6	62.2	61.4	60.9	58.4	60.5	59.3	59.6	59.3	60.0	15	27	62.7	8	00	56.3	6.4	27
62.8	62.5	62.1	61.7	61.4	61.0	60.8	60.3	60.5	60.4	15	24	62.0	8	48	56.0	6.0	28
61.4	61.3	60.8	61.2	61.1	61.0	60.3	60.3	60.3	60.7	14	00	63.1	7	06	57.5	5.6	29
62.7	61.9	61.5	61.0	60.7	60.6	60.5	60.5	(60.5)	60.7	15	00	63.2	7	56	57.4	5.8	30
61.4	61.0	60.9	60.7	60.5	60.4	60.2	60.1	60.1	60.0							5.5	
61.2	60.8	60.7	60.6	60.5	60.5	60.3	60.3	60.2	60.0							5.1	
60.9	60.7	60.8	60.7	60.5	60.4	60.3	60.1	60.2	59.9								

JULY, 1914.

2° WEST PLUS TABULAR QUANTITIES.

Day	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h
1*	(60.5)	(60.4)	(60.3)	(60.2)	(59.8)	(58.7)	(57.9)	57.6	59.2	60.6	61.2	61.3	61.3	60.5	60.6
2*†	60.7	60.6	60.7	60.5	60.3	59.5	58.5	58.6	59.8	61.3	62.6	63.4	63.3	62.9	62.5
3*	60.7	60.7	60.6	60.6	60.1	59.4	57.6	57.6	59.8	62.2	62.6	63.1	63.3	62.5	61.6
4	60.5	60.3	60.4	59.9	59.6	58.6	56.6	56.2	57.6	59.9	61.4	62.6	62.5	62.4	62.4
5	59.9	56.8	58.8	58.7	58.7	60.8	58.5	57.4	58.6	59.7	63.4	63.6	63.6	63.1	62.9
6	60.7	60.9	60.9	60.7	60.3	59.4	58.7	58.4	59.0	59.6	60.4	61.4	62.7	63.0	62.1
7	61.3	60.8	60.9	60.6	61.1	60.1	57.5	57.7	58.6	60.4	61.9	62.4	62.6	61.6	61.6
8*†	(60.7)	(60.6)	(60.4)	(60.1)	(59.3)	(58.0)	(57.0)	56.6	57.8	60.0	61.8	62.9	63.8	63.5	62.6
9	61.4	61.4	61.3	60.8	60.5	58.6	56.7	59.0	59.3	61.0	62.4	62.4	62.5	62.7	63.3
10	60.5	60.7	60.4	60.3	59.6	58.7	58.0	57.6	58.7	60.6	61.9	62.6	62.9	63.1	63.5
11*	60.9	60.8	60.8	60.7	60.6	59.6	58.5	58.3	59.3	60.0	60.5	61.3	62.1	62.7	63.1
12*	61.4	61.4	61.0	60.9	60.6	59.6	58.6	58.3	58.4	58.7	59.4	61.3	61.7	61.5	61.3
13*†	61.3	61.0	60.9	60.5	60.0	59.4	57.9	58.5	59.6	61.6	62.0	61.9	61.8	62.4	62.2
14*	61.4	61.4	60.9	61.0	60.7	59.9	59.5	58.6	59.5	59.8	61.3	61.5	61.6	61.7	62.4
15	61.4	61.4	61.4	61.4	61.0	59.9	58.7	59.1	59.9	60.5	60.3	60.6	61.4	61.7	62.5
16	61.3	60.7	60.5	60.5	60.6	60.3	59.5	59.3	59.7	60.4	61.2	61.9	62.2	63.1	62.2
17*†	61.2	61.0	61.0	60.6	60.6	60.2	60.2	60.2	60.3	60.3	61.4	61.4	61.2	61.5	62.4
18	61.3	61.1	61.1	60.6	60.3	60.1	59.2	58.8	58.8	59.6	61.0	62.6	63.2	63.2	62.2
19†	61.0	61.1	61.2	61.0	61.0	59.7	58.3	58.7	62.1	63.2	63.2	63.0	63.0	63.2	63.0
20*	61.6	61.1	61.1	61.1	60.8	59.4	58.3	58.1	58.8	59.7	60.9	62.1	62.4	62.0	62.1
21	61.1	61.2	61.2	61.0	60.8	59.5	58.9	58.6	57.9	59.0	60.8	61.7	62.3	63.3	63.8
22	61.2	60.8	60.8	60.7	60.1	58.8	57.3	57.3	58.1	58.9	60.1	62.1	63.8	64.1	63.0
23	61.1	61.4	61.4	61.0	61.0	59.9	58.8	58.8	59.8	59.9	60.6	61.3	62.3	63.1	62.8
24	61.0	60.9	60.8	60.1	59.9	59.4	59.5	59.9	60.5	60.7	61.2	60.8	61.5	62.2	63.2
25	60.3	62.3	60.5	60.4	59.7	59.6	59.6	57.7	57.9	58.8	61.2	62.4	62.4	63.4	63.5
26	60.8	60.4	60.7	62.4	61.4	60.2	58.7	58.4	58.9	60.2	61.2	62.3	62.9	62.4	63.0
27	61.0	60.2	61.1	61.2	61.1	60.5	59.1	58.4	59.8	61.0	61.9	62.5	63.8	64.3	64.7
28	60.8	61.8	61.2	61.3	61.0	60.7	59.2	59.3	60.7	60.9	61.1	61.3	61.9	62.7	62.8
29	60.8	60.8	60.8	60.9	60.7	59.7	59.0	58.8	61.3	62.7	62.2	63.8	64.2	65.4	63.9
30	61.5	61.3	61.0	60.9	61.9	60.3	59.6	58.8	60.2	60.9	62.1	62.3	62.7	63.0	63.1
31	61.3	62.1	62.4	61.4	60.8	60.5	59.4	58.4	59.0	58.4	59.1	60.2	61.3	61.5	62.2
Mean.....	61.0	60.9	60.9	60.7	60.4	59.6	58.5	58.3	59.3	60.3	61.4	62.1	62.5	62.7	62.7
Mean*.....	61.0	60.9	60.8	60.6	60.3	59.4	58.4	58.2	59.2	60.4	61.4	62.0	62.2	62.1	62.1
Mean†.....	61.0	60.9	60.8	60.5	60.2	59.4	58.4	58.5	59.9	61.3	62.2	62.5	62.6	62.7	62.5

AUGUST, 1914.

2° WEST PLUS TABULAR QUANTITIES.

1	61.5	62.1	62.0	61.2	60.9	60.2	60.0	59.2	59.4	60.2	61.2	62.2	63.2	63.0	62.5
2	61.5	61.4	63.1	62.2	61.0	59.4	58.1	57.6	60.1	61.8	62.8	63.0	63.0	63.0	62.1
3	61.3	61.3	61.8	62.1	61.3	60.3	58.6	57.6	58.8	61.3	62.3	63.6	64.6	65.3	64.8
4	61.8	61.9	61.8	61.5	60.9	59.7	58.2	57.3	58.5	60.2	61.1	61.9	62.5	63.1	63.3
5	61.4	61.3	61.4	61.3	61.2	60.4	59.3	58.8	59.3	60.3	61.0	61.4	62.1	62.2	62.2
6	60.4	60.5	60.4	60.1	59.5	58.9	58.3	57.9	58.4	59.9	61.9	62.4	63.2	63.3	63.4
7	61.1	62.1	61.4	61.5	61.1	60.1	59.1	58.5	59.0	60.2	61.2	62.1	62.2	62.2	61.7
8	61.8	62.0	61.3	61.5	61.1	59.8	58.2	58.2	59.1	60.3	62.3	64.3	65.0	64.3	64.0
9*†	61.4	61.8	61.8	61.5	61.1	60.2	58.2	57.6	59.1	60.8	62.1	62.7	64.1	65.0	64.9
10*†	61.6	61.8	61.7	61.5	61.3	60.1	58.4	58.3	59.5	61.3	63.2	63.7	64.4	64.4	64.4
11	61.3	61.3	61.8	61.5	61.0	60.1	58.1	57.5	59.0	60.2	61.3	62.1	62.4	63.1	63.4
12*	61.4	61.4	61.4	61.3	61.2	60.2	58.5	58.2	59.2	60.7	62.0	62.8	63.3	64.1	64.0
13*	61.7	61.5	61.6	61.3	60.3	59.6	58.3	57.6	59.2	60.1	60.3	61.6	63.2	63.7	64.3
14*†	61.3	61.3	61.4	61.2	60.9	60.4	59.5	58.8	59.3	60.1	60.3	61.5	63.1	64.3	64.9
15*	61.6	61.9	61.7	62.0	61.7	60.9	59.7	59.6	60.1	60.9	61.9	62.0	62.4	63.1	63.6
16*†	61.9	62.0	62.2	62.0	61.9	60.9	59.1	58.6	59.7	60.8	61.6	62.7	63.1	63.9	63.9
17	61.2	61.7	61.1	61.1	60.9	59.9	58.9	59.7	60.9	62.9	63.2	63.6	63.1	63.7	63.1
18	61.9	61.8	61.7	61.5	61.6	60.6	59.6	58.5	59.2	61.2	63.1	64.9	65.6	64.6	63.3
19	61.6	61.7	61.3	61.1	61.0	60.4	58.7	58.5	59.8	60.6	61.8	63.4	64.3	64.8	64.1
20	61.7	61.9	61.9	62.1	61.8	59.9	57.9	57.4	58.6	60.5	60.9	62.3	63.9	64.6	64.6
21*	62.2	62.2	62.1	61.8	61.7	60.9	58.8	58.2	59.9	61.9	62.9	63.5	63.9	63.9	62.9
22†	62.1	62.1	62.0	61.5	61.0	59.7	57.9	58.2	60.2	62.5	63.9	64.8	64.8	63.9	62.9
23	62.8	62.0	61.1	61.6	59.9	59.0	56.5	55.7	56.9	59.4	60.9	63.0	65.1	65.7	65.3
24	61.9	61.8	61.7	61.1	60.9	60.1	58.7	58.8	59.6	60.9	61.9	62.0	62.8	63.0	63.5
25	60.9	61.7	61.7	61.7	61.2	60.1	57.9	56.7	57.4	59.0	60.7	63.1	64.9	65.6	65.8
26*	62.0	62.0	62.0	61.9	61.2	60.7	58.9	58.7	58.9	60.7	61.9	62.1	63.1	64.4	64.4
27*	61.9	62.6	61.9	61.8	61.2	60.1	58.7	58.8	58.9	59.9	60.9	62.2	63.6	64.9	64.9
28	62.1	62.7	62.1	61.9	61.6	60.0	58.8	58.5	59.6	61.0	62.0	63.5	65.0	65.7	65.1
29	60.9	61.7	62.9	61.9	61.2	61.9	61.6	60.9	60.6	60.2	61.7	63.3	64.1	64.8	64.3
30	62.4	62.0	62.1	62.2	63.7	61.5	59.0	59.0	59.9	61.0	62.0	62.8	63.0	63.6	63.9
31	62.3	64.0	62.0	61.6	62.9	61.1	59.3	58.9	59.5	61.2	63.6	64.9	65.1	64.9	64.1
Mean.....	61.6	61.9	61.8	61.6	61.2	60.2	58.7	58.3	59.3	60.7	61.9	62.9	63.7	64.1	63.9
Mean*.....	61.7	61.8	61.8	61.6	61.2	60.4	58.8	58.4	59.4	60.7	61.7	62.5	63.4	64.2	64.2
Mean†.....	61.7	61.8	61.8	61.5	61.2	60.3	58.6	58.3	59.6	61.1	62.2	63.1	63.9	64.3	64.2

* Ten least disturbed days.

† Five international quiet days.

HOURLY VALUES OF DECLINATION.

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JULY, 1914.

2° WEST PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
/	/	/	/	/	/	/	/	/	/	<i>h</i>	<i>m</i>	/	<i>h</i>	<i>m</i>	/	/	
60.9	61.1	61.4	61.3	60.8	61.2	60.9	60.7	60.7	60.4	12	31	61.3	8	00	(57.6)	3.7	1
61.6	61.2	61.4	60.9	60.9	60.7	60.5	60.6	60.6	61.0	12	19	63.5	7	27	58.3	5.2	2
61.2	60.5	60.6	61.2	61.3	61.0	61.0	60.5	60.6	60.8	13	00	63.3	7	18	57.2	6.1	3
62.2	61.4	61.3	61.4	61.4	61.3	60.9	60.4	60.5	60.5	12	17	62.6	7	42	56.2	6.4	4
62.3	61.7	61.6	61.6	61.0	60.8	59.7	60.7	60.4	60.6	11	30	63.8	2	04	56.5	7.3	5
61.6	60.6	60.7	60.8	60.5	60.7	60.8	60.9	61.4	60.7	13	38	63.2	7	44	57.8	5.4	6
60.7	60.7	60.9	60.8	61.8	61.5	61.0	60.8	60.7	60.8	13	00	62.6	7	00	57.5	5.1	7
62.0	60.8	60.8	60.5	61.6	61.5	60.9	61.4	61.4	60.7	13	00	63.8	8	00	56.6	7.2	8
63.3	62.7	62.3	62.0	61.9	60.6	60.8	60.7	60.7	61.2	16	00	63.3	7	19	56.2	7.1	9
63.5	62.0	61.6	61.4	61.3	61.3	61.2	60.9	60.9	61.0	15	15	63.7	8	06	57.4	6.3	10
62.4	61.3	60.8	61.3	61.2	61.1	61.0	60.8	60.8	60.8	15	00	63.1	7	30	58.2	4.9	11
61.4	60.9	61.0	61.3	61.3	61.4	61.2	61.1	61.2	60.6	12	30	61.7	8	24	57.9	3.8	12
62.5	61.4	61.5	61.6	61.6	61.5	61.5	61.4	61.4	61.1	14	00	62.4	7	16	57.8	4.6	13
62.0	61.6	61.4	61.4	61.6	61.4	60.8	60.9	61.4	61.0	15	00	62.4	8	00	58.6	3.8	14
63.0	62.8	62.8	62.4	62.3	61.9	61.5	61.4	61.4	61.3	16	00	63.0	7	36	58.6	4.4	15
62.0	61.9	61.9	62.2	61.7	61.7	61.6	61.5	61.3	61.2	14	00	63.1	7	46	59.1	4.0	16
62.4	61.8	62.2	62.2	62.0	61.8	61.5	61.4	61.4	61.3	15	30	62.6	6	09	60.0	2.6	17
60.7	60.1	60.4	61.5	61.2	61.5	61.4	61.3	60.9	60.9	13	51	63.3	8	39	58.6	4.7	18
62.2	61.0	61.1	61.3	61.4	61.2	61.3	61.0	60.2	61.4	11	00	63.3	6	47	58.2	5.1	19
62.0	61.8	61.8	62.1	62.0	61.9	61.8	61.3	61.1	61.1	13	00	62.4	7	32	57.9	4.5	20
62.9	62.0	61.6	61.8	61.3	61.1	60.8	61.2	61.3	61.0	15	00	63.8	8	00	56.6	7.2	21
62.5	62.0	61.3	61.5	61.1	61.0	61.1	61.1	61.2	60.8	14	00	64.1	7	39	56.9	7.2	22
62.9	61.8	61.4	61.7	61.6	61.6	61.5	61.4	61.0	61.2	14	21	63.1	7	38	58.7	4.4	23
63.9	64.0	61.9	61.9	61.8	61.6	61.6	60.9	60.8	61.2	16	27	64.2	6	39	59.1	5.1	24
63.4	63.4	62.5	62.0	61.6	61.7	60.7	60.3	60.5	61.1	15	00	63.5	8	04	57.6	5.9	25
63.2	63.1	62.4	62.3	62.3	62.2	61.4	61.2	61.3	61.4	16	00	63.2	8	00	58.4	4.8	26
64.1	63.5	62.8	62.4	62.4	62.1	61.8	61.0	61.1	61.7	15	00	64.7	7	35	58.2	6.5	27
62.5	61.5	60.1	60.9	61.5	61.6	61.2	61.0	60.9	61.2	15	00	62.8	7	20	59.0	3.8	28
64.3	63.4	62.7	62.6	61.9	60.8	61.6	61.5	60.8	61.9	13	57	65.5	7	31	57.9	7.6	29
63.2	61.9	60.5	60.8	59.4	61.2	61.3	61.9	60.7	61.3	15	17	63.3	7	26	57.1	6.2	30
62.5	62.0	62.0	62.1	62.2	62.2	61.4	61.6	61.4	61.1	16	00	62.5	10	20	57.8	4.7	31
62.4	61.8	61.5	61.6	61.5	61.4	61.1	61.1	61.0	61.0							5.3	
61.8	61.2	61.3	61.4	61.4	61.4	61.1	61.0	61.1	60.9							4.6	
62.1	61.2	61.4	61.3	61.4	61.5	61.2	61.1	61.0	61.1								

AUGUST, 1914.

2° WEST PLUS TABULAR QUANTITIES.

61.5	60.7	59.8	61.3	61.4	61.8	61.3	61.3	61.3	61.2	13 23	63.5	8 18	59.1	4.4	1
61.6	61.1	60.1	61.3	61.5	61.6	61.6	61.5	61.3	61.3	3 11	64.0	7 46	57.3	6.7	2
63.4	61.7	61.5	61.4	61.6	61.5	61.1	61.7	61.7	61.7	14 00	65.3	8 00	57.6	7.7	3
62.9	61.4	61.3	61.7	61.4	61.3	61.4	61.3	61.3	61.2	15 00	63.3	8 15	57.2	6.1	4
62.1	62.2	61.7	61.4	61.5	60.9	60.8	60.3	60.3	61.0	13 24	62.3	7 36	58.7	3.6	5
62.8	61.3	60.9	60.3	62.1	61.1	60.3	60.2	60.6	60.8	15 00	63.4	8 18	57.6	5.8	6
61.5	60.6	61.1	61.6	62.0	62.1	62.0	61.9	61.6	61.2	11 39	62.4	7 45	58.3	4.1	7
62.8	60.8	60.5	60.4	60.4	60.5	60.7	60.9	61.0	61.3	12 48	65.1	7 36	57.8	7.3	8
64.3	62.7	62.0	62.0	61.8	61.4	61.3	61.4	61.3	61.7	14 00	65.0	7 45	57.4	7.6	9
63.4	61.9	61.1	61.3	61.3	61.3	61.3	61.2	61.2	61.6	13 46	64.5	7 36	57.6	6.9	10
63.2	62.1	61.9	61.3	61.4	61.4	61.4	61.4	61.3	61.2	15 00	63.4	7 36	57.4	6.0	11
63.3	61.9	62.1	62.3	62.3	62.3	61.6	61.8	61.6	61.6	14 00	64.1	7 50	58.1	6.0	12
64.3	62.3	61.5	61.3	61.3	61.3	61.4	61.4	61.4	61.3	16 00	64.3	7 50	57.4	6.9	13
65.1	63.1	62.7	62.2	62.5	62.2	61.6	61.0	61.7	61.7	16 00	65.1	8 00	58.8	6.3	14
62.9	62.3	62.1	62.0	62.0	61.9	61.9	62.0	62.0	61.8	15 00	63.6	7 19	59.6	4.0	15
63.3	62.7	62.8	62.1	62.0	62.0	61.9	61.7	61.5	61.8	14 23	63.9	8 00	58.6	5.3	16
62.8	62.3	62.4	62.7	62.5	61.9	61.9	61.9	62.0	61.9	14 00	63.7	7 00	58.9	4.8	17
62.7	62.0	61.9	61.8	62.0	61.5	61.3	62.2	61.9	61.9	13 00	65.6	8 12	58.2	7.4	18
63.7	62.7	61.6	61.8	61.7	60.9	60.6	62.0	62.0	61.7	13 36	64.9	7 18	58.1	6.8	19
63.7	63.1	62.9	62.1	61.9	61.9	61.9	62.0	62.7	61.8	14 15	64.8	8 10	57.2	7.6	20
62.9	61.8	62.0	61.9	61.9	62.0	62.0	62.0	62.1	61.9	13 00	63.9	7 26	58.0	5.9	21
61.9	62.0	62.7	62.5	62.2	62.0	61.7	62.0	62.0	61.9	12 26	64.9	7 25	57.8	7.1	22
64.6	62.9	62.3	62.2	61.9	61.9	62.0	61.9	61.9	61.5	14 00	65.7	7 10	54.8	10.9	23
63.1	63.0	62.9	63.1	63.1	62.7	62.2	62.0	61.7	61.8	15 20	63.7	7 23	58.3	5.4	24
64.7	62.9	62.7	61.1	61.9	61.9	61.7	61.9	61.9	61.6	14 39	65.9	7 57	56.5	9.4	25
63.5	62.9	62.8	62.6	62.7	62.2	62.2	62.1	62.0	61.9	14 34	64.5	7 35	57.8	6.7	26
64.1	63.5	63.2	62.9	62.7	62.0	62.0	62.0	61.8	61.9	14 38	65.0	7 09	58.6	6.4	27
64.6	63.8	62.7	62.6	62.2	61.7	60.8	60.7	60.8	62.1	13 36	65.8	7 20	58.0	7.8	28
63.9	63.0	62.8	61.8	62.9	62.0	62.2	61.7	62.4	62.3	14 03	64.9	9 14	60.1	4.8	29
62.8	63.0	63.0	62.4	62.1	62.7	62.3	62.2	62.1	62.1	15 00	63.9	8 10	58.9	5.0	30
63.6	63.0	62.7	62.6	62.7	62.6	62.6	62.6	62.4	62.5	13 00	65.1	7 17	58.7	6.4	31
63.3	62.3	62.0	61.9	62.0	61.8	61.6	61.6	61.6	61.7				6.4		
63.7	62.5	62.2	62.1	62.0	61.9	61.7	61.7	61.7	61.7				6.2		
63.6	62.5	62.3	62.0	61.5	61.4	61.5	61.5	61.6	61.7						

SEPTEMBER, 1914.

2° WEST PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1	62.0	61.8	61.7	61.9	60.9	60.3	59.6	58.9	60.8	61.9	63.2	64.8	65.5	64.5	63.5
2*	62.1	61.9	61.9	61.7	61.5	59.9	57.9	59.0	61.0	62.8	63.8	64.6	64.7	64.8	64.6
3*	62.2	62.5	61.9	61.6	61.1	59.9	57.8	58.0	59.6	61.8	62.7	63.6	63.9	64.0	63.8
4	62.0	62.2	61.8	61.6	61.2	58.9	55.6	56.5	57.8	61.6	63.5	64.5	64.8	64.7	63.9
5	62.5	62.0	61.9	61.6	61.0	59.8	56.8	56.6	59.9	63.6	64.5	65.8	65.8	65.6	64.5
6	62.2	62.3	63.6	61.8	61.6	60.8	58.5	58.0	58.9	60.6	62.0	63.5	64.6	64.8	64.7
7*	62.6	62.8	61.9	61.9	61.5	60.6	58.5	58.0	58.9	60.8	62.6	64.2	64.8	64.7	63.8
8	62.7	62.5	62.2	61.8	61.6	60.7	58.6	58.8	59.9	62.0	64.0	65.1	65.7	65.9	65.5
9	61.7	61.9	61.8	61.5	61.8	61.8	60.0	59.8	60.5	60.9	62.6	63.8	64.8	65.6	65.1
10	62.8	62.8	62.6	62.2	61.8	60.8	58.8	58.9	60.0	61.7	61.8	62.9	63.6	63.6	63.1
11	62.9	62.6	62.2	61.8	61.9	60.6	59.0	59.6	60.6	61.5	62.4	63.4	63.8	63.5	62.7
12	62.6	62.4	61.9	62.4	61.4	60.5	58.9	58.9	59.8	61.3	63.6	65.1	65.7	65.7	64.7
13*	62.6	62.4	62.0	61.9	61.8	61.2	60.5	60.7	61.5	62.0	63.0	64.1	65.1	64.7	63.7
14*	62.3	62.4	62.4	62.5	61.8	60.7	59.1	58.7	58.9	60.7	63.2	63.3	64.1	64.3	63.8
15*	62.6	62.9	62.6	62.0	61.7	60.7	59.8	61.1	61.8	62.5	63.4	63.7	63.7	63.0	62.9
16	62.3	62.3	62.3	61.7	62.7	60.5	59.7	59.9	61.7	63.5	64.7	65.2	65.5	65.4	64.5
17	62.6	62.6	62.6	62.4	61.8	60.9	59.7	59.7	59.8	60.5	61.5	62.8	63.7	63.0	63.3
18	(61.9)	(61.8)	(61.7)	(61.5)	61.3	59.6	58.5	58.9	60.3	61.9	63.0	64.7	65.0	64.8	64.6
19	62.8	62.4	63.0	61.7	61.5	60.4	58.9	59.8	61.7	63.5	64.8	65.1	64.8	63.9	63.5
20*	62.7	62.6	62.5	62.3	61.7	60.2	58.5	59.4	61.5	63.7	65.0	66.1	66.1	65.7	65.5
21*	62.7	62.7	62.4	61.9	61.6	60.4	58.7	59.6	61.4	62.5	64.8	65.4	65.5	65.2	64.2
22*	62.6	62.5	62.4	61.7	61.5	60.8	59.0	59.6	60.4	61.6	62.9	64.4	64.9	64.6	64.2
23	62.6	62.1	60.8	60.8	61.4	59.9	59.1	59.6	60.3	62.2	63.7	65.0	66.1	66.7	66.4
24	62.5	62.7	63.5	62.3	62.2	61.4	59.7	59.8	60.5	61.5	62.6	63.9	64.6	64.6	64.6
25	62.7	62.6	62.3	62.5	62.7	61.6	60.9	60.9	61.6	61.9	62.6	62.8	63.5	63.8	63.8
26*	62.8	62.9	62.8	62.7	62.6	62.0	61.5	61.4	61.4	61.7	62.3	62.7	62.6	61.9	62.3
27	62.7	62.8	62.0	61.6	61.6	61.6	61.3	61.3	61.6	61.6	62.4	63.2	64.6	65.0	65.6
28	62.5	62.4	62.5	62.4	62.4	61.7	60.6	60.4	61.4	61.6	61.8	62.6	62.6	62.6	62.9
29	62.5	62.5	61.6	61.5	61.0	61.6	62.0	61.5	62.5	63.9	64.9	64.7	64.4	63.9	63.7
30	62.9	62.8	62.7	62.8	63.4	62.6	61.9	61.8	62.9	63.6	65.0	65.7	65.4	64.0	63.6
Mean.....	62.5	62.4	62.2	61.9	61.7	60.7	59.3	59.5	60.6	62.1	63.3	64.2	64.7	64.5	64.1
Mean*.....	62.5	62.6	62.3	62.0	61.7	60.6	59.2	59.6	60.6	62.0	63.3	64.2	64.5	64.3	63.9
Mean†.....	62.5	62.5	62.3	62.1	61.8	60.7	59.1	59.3	60.3	61.7	63.1	64.0	64.3	64.2	63.7

OCTOBER, 1914.

2° WEST PLUS TABULAR QUANTITIES.

1	63.3	62.9	62.6	63.4	62.7	61.8	61.3	62.4	63.2	63.7	65.3	65.6	65.6	65.3	64.7
2	62.6	62.8	62.8	62.7	62.8	62.5	61.4	60.8	61.6	63.3	64.2	64.5	65.1	64.9	64.7
3	63.3	63.5	62.9	63.0	62.9	62.4	61.2	60.4	61.2	61.8	62.6	63.4	64.5	66.0	66.2
4	62.5	62.5	63.1	62.6	63.1	62.6	61.4	60.5	59.7	60.5	61.6	62.4	63.5	64.3	64.5
5*	63.4	63.4	63.4	63.4	62.6	62.4	61.6	61.1	60.8	62.1	63.3	64.1	64.5	65.1	64.6
6	63.7	63.3	62.8	62.6	62.6	62.4	61.4	60.6	60.4	61.4	63.2	63.6	64.3	65.2	65.2
7	63.2	63.1	63.0	62.2	62.2	61.5	60.4	59.8	60.2	61.0	62.5	63.9	64.4	64.8	64.3
8	63.1	63.3	62.9	62.8	62.5	62.4	61.3	60.3	60.3	60.9	62.1	63.1	63.5	64.5	65.1
9	63.4	63.2	62.8	64.1	62.4	63.2	63.3	62.3	61.3	62.1	62.1	62.4	63.3	63.3	64.0
10	63.2	63.2	63.1	63.0	63.0	63.3	64.0	63.9	63.4	62.9	62.4	63.0	63.2	63.1	64.1
11*	63.2	63.2	63.3	63.4	62.9	63.3	63.5	63.2	63.2	63.6	63.6	63.0	62.8	63.3	64.2
12*	63.3	63.3	63.2	63.2	62.7	62.7	62.1	61.6	62.4	63.4	63.5	63.8	64.0	64.2	64.5
13*	63.2	63.1	63.2	63.0	62.3	63.5	63.4	62.5	62.4	63.0	63.3	63.3	63.0	63.2	64.1
14*	63.3	63.3	63.2	63.2	63.1	63.1	62.2	60.9	60.5	61.1	62.2	62.2	62.2	62.9	63.5
15	63.1	63.1	63.1	63.0	62.7	62.3	61.3	60.4	60.9	61.9	63.1	63.8	63.2	63.2	63.6
16	63.1	63.0	63.1	63.9	62.8	62.6	61.9	61.3	62.1	63.3	63.9	63.5	63.0	62.2	62.9
17	63.2	63.7	63.4	62.9	62.5	64.4	63.8	62.3	64.1	65.5	66.0	65.6	64.6	64.3	64.1
18	63.3	63.3	63.2	63.2	63.6	62.6	62.1	61.1	62.4	64.2	65.2	66.0	65.6	65.1	65.1
19	63.2	63.9	63.8	63.2	62.5	62.4	61.9	61.1	61.3	62.3	63.2	63.2	63.1	63.1	63.2
20	63.4	63.2	63.1	63.6	62.5	62.9	61.5	59.9	59.1	60.7	62.3	64.0	64.8	64.9	64.9
21	62.8	63.0	62.8	62.2	62.9	62.3	61.5	61.1	61.3	62.1	63.1	64.1	64.2	65.2	65.1
22	63.1	63.4	63.0	63.7	62.8	62.6	62.2	61.3	61.1	62.1	62.5	63.0	63.1	63.9	64.9
23*	63.5	63.9	63.0	63.1	63.1	63.1	62.7	61.8	61.0	61.2	62.1	63.0	63.9	64.2	64.3
24*	63.3	63.2	63.2	63.1	63.1	63.1	63.0	62.6	62.0	62.1	62.2	62.8	62.9	63.8	64.9
25*	63.2	63.2	63.2	63.2	63.3	63.7	63.2	62.1	61.9	61.9	62.1	62.7	62.9	63.3	64.0
26*	63.7	63.8	63.8	63.8	63.4	63.2	62.6	62.0	61.9	62.2	63.0	63.7	63.7	63.7	64.2
27	64.0	63.8	63.6	63.7	63.4	63.1	62.8	62.3	62.7	62.8	63.2	64.0	63.9	63.8	63.8
28	65.4	61.8	62.7	62.0	62.0	62.1	63.8	63.9	64.0	64.0	64.7	65.1	64.8	65.0	64.1
29	62.8	64.7	63.2	63.0	63.9	65.4	63.8	63.8	63.2	64.0	64.0	64.0	63.0	63.0	64.0
30	64.1	65.0	64.1	63.9	63.8	63.5	62.8	62.2	62.5	62.8	63.3	63.7	63.1	63.1	63.8
31*	64.2	64.7	64.3	64.0	63.7	63.3	62.6	61.8	62.0	63.0	64.2	64.9	64.2	63.7	63.7
Mean.....	63.4	63.4	63.2	63.2	62.9	62.9	62.3	61.7	61.7	62.5	63.2	63.7	63.8	64.1	64.3
Mean*.....	63.4	63.5	63.4	63.3	63.0	63.1	62.7	62.0	61.8	62.4	63.0	63.4	63.4	63.7	64.2
Mean†.....	63.4	63.4	63.3	63.3	63.1	63.2	62.6	61.8	61.7	62.1	62.6	63.0	63.1	63.6	64.2

* Ten least disturbed days.

† Five international quiet days.

HOURLY VALUES OF DECLINATION.

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SEPTEMBER, 1914.

2° WEST PLUS TABULAR QUANTITIES.

16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean	Maximum			Minimum			Range	Day
										h	m		h	m			
62.6	62.3	62.6	62.5	62.5	62.5	61.9	61.9	62.1	62.2	13	00	65.5	7	18	58.8	6.7	1
62.9	62.0	62.2	62.6	62.5	62.7	62.6	62.5	62.4	62.3	14	00	64.8	7	06	57.8	7.0	2
63.8	63.1	62.9	62.9	62.8	62.8	62.7	62.6	62.4	62.1	14	00	64.0	7	33	57.6	6.4	3
63.3	62.9	62.9	62.8	62.1	62.0	62.2	62.5	62.5	61.8	13	00	64.8	7	00	55.6	9.2	4
63.5	62.8	62.6	62.6	62.6	61.5	61.2	61.8	61.9	62.2	12	00	65.8	7	09	56.3	9.5	5
63.9	63.1	62.2	62.2	62.6	62.5	62.4	62.5	62.5	62.2	14	00	64.8	7	40	57.8	7.0	6
62.7	62.1	62.6	62.6	62.7	62.4	62.3	62.2	62.5	62.1	13	00	64.8	7	25	57.9	6.9	7
64.3	63.5	62.9	62.3	62.1	62.2	62.3	62.5	62.9	62.6	14	00	65.9	7	25	58.3	7.6	8
64.6	63.5	63.0	62.8	62.7	62.6	62.4	62.6	62.6	62.5	14	00	65.6	8	13	58.8	6.8	9
63.0	63.0	63.2	62.8	62.8	61.9	61.9	62.7	62.7	62.1	14	00	63.6	7	00	58.5	5.1	10
61.9	61.8	62.7	62.8	62.7	62.7	62.7	62.6	62.6	62.1	13	00	63.8	7	15	58.8	5.0	11
63.7	63.4	63.1	62.7	62.6	62.7	62.7	62.6	62.7	62.5	13	30	65.9	7	18	58.5	7.4	12
62.8	62.7	62.8	62.7	62.8	62.7	62.7	62.4	62.4	62.6	13	00	65.1	6	49	60.4	4.7	13
63.7	63.7	63.4	62.7	62.8	62.7	62.7	62.6	62.6	62.3	13	24	64.4	8	00	58.7	5.7	14
63.5	63.8	63.4	62.8	62.6	62.7	62.7	62.5	62.4	62.5	17	00	63.8	7	00	59.8	4.0	15
64.4	63.8	63.4	62.7	62.7	62.5	62.7	62.7	62.7	62.9	13	27	65.7	7	00	59.7	6.0	16
62.9	63.2	63.0	62.8	62.6	62.6	62.1	(62.1)	(62.0)	62.1	13	38	63.8	7	38	59.3	4.5	17
63.6	63.6	63.0	62.9	62.8	62.8	62.7	62.8	62.8	62.4	13	40	65.1	7	20	58.4	6.7	18
63.4	63.4	63.1	62.8	62.7	62.7	62.7	62.8	62.7	62.7	11	22	65.4	6	42	58.8	6.6	19
64.7	63.6	63.0	64.8	62.7	62.6	62.8	62.8	62.8	63.1	12	11	66.5	7	00	58.5	8.0	20
64.5	63.3	63.2	62.7	62.7	62.7	62.7	62.7	62.7	62.8	13	00	65.5	7	00	58.7	6.8	21
63.8	63.6	63.3	63.6	62.8	63.7	63.4	62.4	62.6	62.6	13	00	64.9	8	00	59.6	5.3	22
64.7	63.7	61.7	62.0	62.5	62.6	62.3	62.2	63.2	62.6	13	38	67.4	7	08	59.1	8.3	23
64.6	64.4	63.6	62.9	62.8	62.8	62.5	62.6	62.5	62.7	13	52	64.7	7	51	59.6	5.1	24
63.8	63.8	63.7	63.4	63.3	63.0	63.0	62.8	62.9	62.7	16	00	63.8	7	16	60.7	3.1	25
63.3	64.4	64.0	63.7	63.4	63.3	62.8	62.9	62.9	62.7	17	00	64.4	7	48	60.8	3.6	26
63.0	66.0	65.5	65.6	64.7	64.2	63.7	62.6	62.8	63.3	18	30	66.1	7	18	60.8	5.3	27
64.0	64.8	65.2	64.4	63.7	63.4	63.5	63.5	63.6	62.8	17	30	65.4	7	54	60.1	5.3	28
63.7	64.0	64.0	63.6	63.5	63.5	62.7	63.3	63.3	63.1	0	13	65.0	4	36	60.7	4.3	29
63.3	63.7	63.0	62.3	63.3	63.3	62.6	63.3	62.8	63.3	12	00	65.7	7	36	61.6	4.1	30
63.6	63.4	63.2	63.0	62.8	62.7	62.6	62.6	62.6	62.5							6.1	
63.6	63.2	63.1	63.1	62.8	62.8	62.7	62.6	62.6	62.5							5.8	
63.4	63.1	63.1	62.9	62.8	62.7	62.6	62.5	62.5	62.4								

OCTOBER, 1914.

2° WEST PLUS TABULAR QUANTITIES.

16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean	Maximum			Minimum			Range	Day
										h	m		h	m			
64.4	63.9	63.7	63.5	62.6	62.4	63.2	62.5	62.7	63.4	12	00	65.6	7	13	60.7	4.9	1
64.4	63.8	63.3	62.9	62.7	63.4	63.5	63.2	62.6	63.2	13	24	65.2	7	15	60.5	4.7	2
65.2	64.3	63.3	63.3	63.1	63.0	62.6	63.4	63.3	63.2	14	33	66.2	7	51	60.3	5.9	3
64.0	63.4	63.2	63.3	63.2	63.2	63.3	63.4	63.5	62.7	15	00	64.5	9	00	59.7	4.8	4
64.3	63.2	63.2	63.1	63.1	63.2	63.3	63.5	63.4	63.2	14	03	65.1	8	32	60.6	4.5	5
64.5	64.5	63.3	62.7	63.2	63.2	62.5	62.7	62.6	63.0	15	00	65.2	8	41	60.3	4.9	6
64.2	64.2	63.7	63.4	62.5	62.6	62.5	62.6	63.0	62.7	14	00	64.8	8	30	59.7	5.1	7
65.1	64.2	63.4	62.4	63.0	63.0	62.7	63.3	63.3	62.8	15	00	65.1	8	33	60.1	5.0	8
64.3	64.2	62.5	63.3	63.4	63.3	63.0	63.1	63.2	63.1	16	34	64.3	9	00	61.3	3.0	9
64.4	63.7	63.3	63.3	63.3	63.2	63.2	63.2	63.0	63.3	16	00	64.4	11	00	62.4	2.0	10
64.6	64.2	64.0	63.9	63.3	63.2	63.3	63.3	63.4	63.5	16	00	64.6	12	43	62.3	2.3	11
64.7	64.5	64.1	63.6	63.3	63.2	63.2	63.3	63.3	63.4	16	00	64.7	8	00	61.6	3.1	12
64.9	64.6	63.8	63.4	63.3	63.3	63.3	63.3	63.3	63.3	16	00	64.9	4	43	62.1	2.8	13
64.1	64.2	64.0	63.6	62.5	63.2	63.2	63.3	63.3	62.8	17	00	64.2	9	00	60.5	3.7	14
64.3	64.8	64.4	63.6	63.5	62.6	63.1	63.1	63.2	63.0	17	00	64.8	8	00	60.4	4.4	15
63.4	64.2	63.9	63.9	63.5	62.9	63.1	63.4	63.4	63.1	3	39	64.7	7	42	61.0	3.7	16
64.1	(64.0)	(63.6)	(63.5)	(63.4)	(63.4)	63.3	63.3	63.3	63.8	10	30	66.1	8	00	62.3	3.8	17
64.5	64.3	64.0	63.4	63.2	62.4	63.2	63.9	63.2	63.7	12	00	66.0	8	00	61.1	4.9	18
63.9	64.1	63.7	63.1	63.1	63.2	63.2	63.5	63.7	63.0	17	00	64.1	8	00	61.1	3.0	19
64.1	63.4	63.1	63.0	63.1	63.0	62.9	62.9	63.9	62.9	15	00	64.9	9	00	59.1	5.8	20
65.0	64.6	64.1	63.5	63.1	63.1	63.0	63.2	63.3	63.2	14	00	65.2	8	38	61.0	4.2	21
65.3	65.1	64.1	63.4	63.2	63.1	63.2	63.2	63.1	63.2	16	00	65.3	9	00	61.1	4.2	22
64.8	64.7	64.0	63.7	63.3	63.1	63.1	63.1	63.3	63.2	16	00	64.8	9	00	61.0	3.8	23
65.7	65.2	64.1	63.8	63.3	63.1	63.0	63.0	63.0	63.3	16	00	65.7	9	00	62.0	3.7	24
64.9	64.8	64.0	63.7	63.5	63.3	63.4	63.3	63.5	63.3	16	00	64.9	9	30	61.7	3.2	25
65.0	65.1	64.1	63.8	63.5	63.2	63.6	63.4	63.1	63.5	17	00	65.1	8	36	61.8	3.3	26
64.6	65.0	64.4	63.9	63.7	64.0	63.9	63.7	65.1	63.7	24	00	65.1	7	53	62.0	3.1	27
63.0	63.9	64.0	63.4	63.4	63.7	63.9	63.6	62.1	63.6	0	45	66.0	5	46	61.7	4.3	28
64.4	64.8	64.0	63.8	63.9	63.9	63.1	64.0	64.1	63.8	6	00	65.4	13	24	62.5	2.9	29
64.1	64.1	63.1	63.9	63.9	63.9	63.9	64.0	64.1	63.6	2	09	65.1	8	33	62.0	3.1	30
64.0	63.8	63.7	63.5	63.5	63.7	63.8	63.8	63.9	63.7	12	00	64.9	8	36	61.5	3.4	31
64.5	64.3	63.7	63.4	63.2	63.2	63.2	63.3	63.3	63.3							3.9	
64.7	64.4	63.9	63.6	63.3	63.2	63.3	63.3	63.4	63.3							3.4	
64.9	64.8	64.1	63.7	63.3	63.2	63.2	63.2	63.3	63.3								

NOVEMBER, 1914.

2° WEST PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1	63.8	63.7	63.7	63.5	63.4	63.7	63.3	62.7	62.7	65.1	64.9	64.9	63.8	62.9	63.0
2	63.9	63.9	64.5	64.0	63.2	63.0	62.8	62.9	63.0	63.7	65.1	65.4	64.1	63.8	64.0
3	63.9	63.9	64.1	62.9	63.1	63.1	62.6	61.7	61.8	63.1	64.6	64.9	64.5	64.2	64.2
4	64.2	65.0	63.6	63.1	64.8	64.7	63.4	62.0	61.5	61.8	63.0	63.9	64.0	63.6	63.7
5	64.1	64.1	64.1	64.0	64.8	64.6	63.7	62.2	62.5	62.3	63.0	64.0	64.7	64.8	65.0
6*	64.1	64.5	64.3	64.1	63.9	63.9	63.2	62.0	61.3	61.5	62.7	63.9	64.7	64.9	64.6
7	64.1	64.8	63.9	64.7	65.0	64.0	63.9	63.1	60.9	61.1	62.7	64.0	64.9	65.7	65.6
8	63.9	64.1	64.1	64.5	64.5	64.1	63.5	61.9	60.9	60.4	61.3	63.0	64.0	64.8	64.8
9*†	64.1	64.7	64.3	64.2	64.1	64.0	63.6	63.2	61.0	60.7	61.3	62.2	62.6	63.0	63.8
10	64.0	64.0	64.1	64.1	63.9	64.1	64.0	62.5	61.2	60.9	61.8	62.7	63.5	64.7	65.0
11	64.3	64.6	64.0	64.4	64.3	64.3	63.9	63.7	65.6	65.1	64.9	65.7	65.2	65.0	65.3
12*	64.3	64.4	64.2	63.9	63.9	64.2	64.2	63.9	63.2	62.8	63.4	64.6	64.7	65.2	65.7
13	64.2	64.2	64.1	63.9	63.8	63.9	63.8	62.9	62.6	62.9	63.9	63.8	64.0	64.4	64.8
14	64.3	64.9	64.7	64.7	64.8	64.8	64.8	64.0	63.6	62.9	62.9	62.9	63.0	63.8	64.6
15	64.0	64.0	64.1	63.9	64.1	64.2	64.2	63.6	63.2	62.9	63.2	63.9	63.8	64.0	65.0
16	63.8	64.0	63.8	63.9	64.6	65.1	64.6	64.7	65.0	64.6	64.7	64.6	64.8	64.6	64.9
17	62.9	64.0	63.7	63.7	63.7	63.8	63.8	63.7	63.3	62.9	63.3	63.1	63.4	63.9	64.0
18	64.1	64.0	63.9	63.9	64.0	63.8	64.3	62.9	62.8	62.9	63.3	63.9	64.5	64.8	64.3
19	63.9	64.8	64.7	64.2	63.7	63.9	63.8	62.8	61.9	61.9	62.8	63.7	64.5	64.8	65.0
20*†	64.6	64.5	64.6	64.3	63.9	63.9	63.8	62.9	62.8	63.4	64.3	65.3	65.7	65.6	65.0
21*†	64.5	64.7	64.7	64.6	64.5	63.9	63.8	62.7	61.5	61.3	62.7	64.3	65.3	65.7	65.5
22*†	64.0	64.2	64.3	64.2	64.0	63.9	63.8	62.7	61.9	61.8	61.9	63.0	64.7	65.6	65.5
23*†	64.3	64.7	64.6	64.6	64.6	64.0	64.0	62.4	60.8	60.0	60.3	61.6	63.7	65.0	65.6
24*	64.1	64.6	64.6	64.6	64.4	64.4	64.2	62.8	61.1	60.7	61.1	63.0	65.6	67.2	66.7
25*	64.5	64.7	64.5	64.6	64.5	64.5	64.6	63.6	62.0	60.9	61.3	62.0	63.9	65.8	66.1
26	63.9	64.0	64.0	64.1	64.3	64.6	65.0	64.5	63.8	63.6	63.1	63.0	63.7	64.7	65.4
27	64.7	64.9	64.9	64.7	64.4	65.0	65.5	64.6	64.0	63.8	63.8	63.8	64.6	64.9	65.5
28	64.3	64.7	64.4	64.6	64.7	64.7	65.0	64.4	63.6	62.8	62.7	62.8	63.6	64.1	64.7
29	64.8	65.0	65.0	65.2	64.7	64.8	64.7	63.6	62.2	62.0	62.8	63.4	64.2	64.9	65.6
30*	64.7	64.7	64.7	64.5	64.2	64.3	63.9	62.8	62.0	62.8	63.9	64.9	65.8	66.0	66.6
Mean.....	64.1	64.4	64.3	64.2	64.2	64.2	64.0	63.1	62.5	62.4	63.0	63.7	64.3	64.7	65.0
Mean*.....	64.3	64.6	64.5	64.4	64.2	64.1	63.9	62.9	61.8	61.6	62.3	63.4	64.7	65.4	65.5
Mean†.....	64.3	64.6	64.5	64.4	64.2	63.9	63.8	62.8	61.6	61.4	62.1	63.3	64.4	65.0	65.1

DECEMBER, 1914.

2° WEST PLUS TABULAR QUANTITIES.

1*	64.3	64.5	64.5	64.4	63.9	64.2	63.9	63.4	62.5	62.6	63.6	64.5	65.4	65.5	65.7
2*†	64.4	64.4	64.4	64.1	63.9	64.0	63.8	62.8	61.9	62.4	63.5	63.7	65.5	66.0	66.0
3	64.6	64.6	64.6	64.5	64.5	64.7	64.7	63.6	62.7	63.4	64.0	64.0	64.7	65.5	65.3
4	65.7	65.5	65.4	64.7	64.7	64.6	64.5	63.4	63.3	63.7	64.5	65.5	66.5	66.6	66.7
5	65.2	65.4	65.2	64.7	64.7	64.5	64.2	62.5	61.1	60.7	61.5	62.7	64.7	65.8	66.3
6	65.0	65.4	65.4	64.9	64.6	64.5	64.5	63.5	62.3	61.7	62.6	64.5	65.8	66.7	67.4
7	65.0	64.6	64.9	64.7	64.6	63.9	64.6	63.6	62.5	62.7	63.0	64.5	65.9	66.5	66.6
8	64.8	65.4	65.5	65.7	65.8	64.7	65.0	63.8	62.6	62.1	62.4	62.8	64.3	65.8	66.7
9	64.9	64.9	65.2	65.1	65.3	64.8	65.5	63.7	61.9	61.0	60.7	61.7	63.8	65.8	66.7
10	64.8	65.5	65.7	65.6	65.8	65.7	65.7	64.7	63.6	62.5	61.9	63.0	64.4	65.7	66.6
11	64.8	65.0	65.6	65.4	65.0	65.5	65.8	65.7	64.0	63.0	62.7	63.7	65.6	66.5	66.8
12	64.8	65.5	65.5	64.9	65.0	65.1	65.7	64.9	63.7	62.7	61.7	62.7	63.9	65.0	65.7
13*†	65.4	64.9	64.8	64.7	64.7	65.5	64.7	63.6	62.4	61.7	62.7	65.0	66.7	66.8	66.8
14*	64.9	64.9	64.9	64.9	64.8	64.7	65.0	64.3	63.4	63.5	62.8	63.0	64.7	65.6	66.0
15*†	64.8	64.8	64.8	64.9	64.7	64.7	65.5	64.8	64.5	64.6	64.9	66.4	66.7	66.5	66.5
16	64.8	65.1	65.1	64.9	64.8	64.8	64.8	63.9	63.5	63.8	64.6	65.6	67.2	68.7	68.5
17	65.2	65.2	65.4	65.9	64.7	64.8	64.9	64.8	63.7	63.7	63.7	63.6	66.4	67.8	67.7
18	65.2	65.0	65.5	65.3	65.2	64.8	65.0	63.9	62.8	62.4	62.8	64.2	65.8	66.9	67.5
19	65.4	65.3	65.0	65.6	65.5	65.1	65.5	64.4	62.7	62.5	63.5	64.6	65.9	67.7	68.2
20*	65.4	65.6	65.7	65.6	65.5	65.4	65.4	64.1	62.5	62.1	63.4	64.8	66.3	66.9	67.0
21*†	65.0	65.4	65.0	65.2	65.2	64.9	65.0	64.0	62.7	61.7	62.3	63.8	65.2	65.7	66.7
22	65.3	65.5	65.7	65.5	65.5	65.3	65.0	63.7	61.9	61.7	62.7	65.2	66.8	67.5	66.7
23*	65.4	65.5	65.6	65.6	65.6	65.5	65.4	64.3	62.7	61.8	62.7	65.5	66.8	67.7	67.7
24	65.4	65.6	65.7	65.7	65.6	65.2	65.7	64.6	62.5	61.1	63.7	66.5	67.8	67.0	66.4
25*	65.2	65.3	65.5	65.4	65.5	65.6	65.6	64.6	63.5	61.7	61.5	64.9	67.1	67.9	67.5
26*†	65.6	65.6	65.6	65.6	65.4	65.4	65.3	64.4	62.9	61.5	60.8	65.0	67.4	68.0	67.7
27	65.5	65.5	65.4	65.5	65.5	65.6	65.5	63.9	61.9	60.8	60.9	64.6	67.0	68.4	68.1
28	64.8	65.6	65.4	64.8	66.6	65.4	65.4	63.8	61.9	60.7	60.6	63.7	66.0	66.7	67.6
29	65.1	65.1	65.2	65.4	65.4	65.5	65.5	64.4	63.3	62.7	63.6	66.6	67.7	67.9	67.5
30	65.4	65.1	65.5	65.5	65.4	65.3	64.7	63.5	61.3	58.8	62.8	64.9	67.1	67.5	67.1
31	65.4	65.6	65.4	65.4	65.5	65.1	65.6	64.8	62.8	61.9	65.4	67.5	68.0	67.3	66.5
Mean.....	65.1	65.2	65.3	65.2	65.1	65.0	65.1	64.0	62.7	62.2	62.8	64.5	66.0	66.8	66.9
Mean*.....	65.0	65.1	65.1	65.0	64.9	65.0	65.0	64.0	62.9	62.4	62.8	64.7	66.2	66.7	66.8
Mean†.....	65.0	65.0	64.9	64.9	64.8	64.9	64.9	63.9	62.9	62.4	62.8	64.8	66.3	66.6	66.7

* Ten least disturbed days.

† Five international quiet days.

HOURLY VALUES OF DECLINATION.

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NOVEMBER, 1914.

2° WEST PLUS TABULAR QUANTITIES.

16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean	Maximum		Minimum		Range	Day
										h	m	h	m		
63.8	64.2	64.0	63.7	63.7	63.3	63.4	63.6	64.0	63.7	10	42	65.7	8	07	1
64.1	64.7	64.0	63.8	63.7	63.7	63.7	63.8	63.9	63.9	11	48	65.5	8	09	2
64.4	64.0	63.9	63.2	61.8	63.3	63.1	63.8	63.9	63.5	12	00	64.9	8	45	3
63.9	63.0	62.7	62.7	62.8	63.0	63.5	63.6	63.9	63.4	2	00	65.0	9	15	4
64.7	64.0	63.9	63.7	63.3	63.4	63.7	63.9	63.9	63.8	14	54	65.1	8	30	5
64.3	64.2	63.9	63.3	63.1	63.6	63.5	63.5	63.9	63.6	14	00	64.9	9	00	6
65.0	64.9	64.4	63.6	63.7	63.5	63.6	63.8	63.9	64.0	14	00	65.7	9	39	7
64.7	64.9	64.3	63.9	63.8	63.7	63.7	63.3	63.8	63.6	17	00	64.9	10	00	8
64.7	64.8	63.9	63.9	63.7	63.8	63.8	63.9	63.9	63.5	16	15	64.9	9	44	9
64.8	63.9	63.8	63.7	63.7	62.9	63.4	63.5	64.2	63.5	15	00	65.0	10	00	10
65.3	64.9	64.3	63.6	63.7	63.7	63.7	63.8	65.0	64.5	1	11	65.8	7	36	11
65.7	64.8	63.9	63.9	63.7	63.6	64.1	64.6	64.2	64.2	15	00	65.7	9	55	12
65.0	65.1	64.4	64.3	64.0	64.1	64.1	64.0	64.0	64.0	17	00	65.1	9	00	13
65.0	64.9	64.9	65.0	64.1	64.0	64.0	63.9	63.9	64.2	7	26	65.2	10	29	14
65.7	65.2	64.7	64.2	62.9	63.7	63.7	63.7	63.9	64.0	16	00	65.7	10	00	15
65.0	64.7	64.0	63.8	63.4	63.7	63.7	63.6	63.6	64.3	8	35	65.0	19	26	16
64.7	64.9	63.0	63.8	63.6	63.6	63.9	64.0	64.0	63.7	17	00	64.9	0	45	17
64.6	64.9	63.8	63.8	63.7	63.7	63.6	62.9	64.1	63.9	17	00	64.9	9	00	18
64.7	64.6	64.0	63.9	63.9	64.0	64.0	64.4	64.6	63.9	15	00	65.0	9	33	19
64.8	64.3	63.8	63.7	63.6	63.7	63.8	63.9	64.1	64.2	13	00	65.7	9	00	20
64.6	64.7	64.5	63.8	63.8	63.8	63.8	63.8	63.9	64.0	14	00	65.7	10	00	21
64.8	64.5	63.9	63.9	63.8	63.8	63.8	63.9	64.1	63.8	14	00	65.6	10	00	22
65.8	64.8	64.1	63.8	63.8	63.8	63.8	63.9	64.1	63.7	16	00	65.8	10	83	23
65.7	64.8	64.4	64.0	63.9	63.7	63.9	64.0	64.1	64.1	14	16	67.4	10	00	24
65.6	65.2	64.2	63.9	63.9	63.8	63.8	63.8	63.8	64.0	14	30	66.5	10	00	25
66.6	66.4	66.3	64.5	63.9	63.8	63.5	62.3	63.8	64.3	16	00	66.6	22	45	26
65.6	64.9	64.6	63.8	63.8	63.7	63.8	63.9	63.8	64.5	16	08	65.8	10	18	27
64.9	64.8	64.4	64.0	63.9	63.3	63.8	64.0	64.2	64.1	6	30	65.0	11	30	28
65.1	64.4	64.3	64.0	64.0	63.8	63.9	64.0	64.5	64.2	3	24	65.7	9	33	29
65.9	65.3	64.3	64.3	64.0	63.9	63.9	64.1	64.1	64.4	15	00	66.6	9	00	30
65.0	64.7	64.2	63.8	63.6	63.6	63.7	63.8	64.0	63.9						
65.2	64.7	64.1	63.8	63.7	63.8	63.8	63.9	64.0	63.9						
64.9	64.6	64.0	63.8	63.8	63.8	63.8	63.9	64.1	63.8						

DECEMBER, 1914.

2° WEST PLUS TABULAR QUANTITIES.

16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean	Maximum		Minimum		Range	Day
										h	m	h	m		
65.7	65.1	64.3	64.1	64.0	64.1	64.2	64.4	64.4	64.3	16	00	65.7	9	23	1
65.9	64.8	64.4	64.3	64.3	64.2	64.0	64.3	64.5	64.2	14	30	66.3	9	00	2
65.3	64.8	64.4	64.4	64.5	64.5	64.5	64.8	65.0	64.5	14	00	65.5	9	27	3
66.6	65.6	64.7	64.5	64.6	63.9	63.7	64.3	64.5	64.9	15	00	66.7	9	00	4
66.2	65.5	64.8	64.6	64.5	64.5	64.7	64.8	65.3	64.3	15	00	66.3	10	00	5
66.5	65.5	64.7	64.6	64.5	64.5	64.4	64.3	64.7	64.7	15	00	67.4	10	00	6
66.7	65.7	64.9	64.7	64.7	64.2	64.3	64.0	64.0	64.6	16	00	66.7	9	50	7
66.0	65.3	64.7	64.6	64.5	64.4	64.6	64.7	64.6	64.6	15	00	66.7	10	00	8
66.6	65.4	65.5	64.9	64.8	64.4	64.5	64.5	64.7	64.4	15	00	66.7	11	00	9
66.6	64.7	65.5	64.9	64.7	64.7	64.7	64.7	64.8	64.9	15	42	66.8	10	42	10
66.9	65.8	64.8	64.7	64.6	64.6	64.6	64.7	64.8	65.0	16	00	66.9	11	00	11
66.1	65.7	64.8	64.7	64.7	64.8	64.7	64.7	65.3	64.7	16	00	66.1	11	00	12
66.7	65.7	64.7	64.7	64.7	64.6	64.7	64.9	64.8	64.8	14	00	66.8	10	00	13
66.0	65.8	65.5	64.9	64.8	64.7	64.8	64.7	64.7	64.7	15	30	66.1	11	30	14
66.1	65.0	64.8	64.7	64.8	64.7	64.8	64.9	64.9	65.2	13	00	66.7	9	00	15
67.3	65.4	65.2	64.7	64.7	64.7	64.7	64.9	64.8	65.3	14	30	69.3	9	00	16
66.7	65.7	64.7	64.5	64.6	64.6	64.6	64.7	64.8	65.1	14	00	67.8	11	41	17
66.7	65.8	64.9	64.5	64.5	64.5	64.8	64.7	64.8	65.9	15	00	67.5	10	00	18
66.7	65.4	64.9	64.7	64.7	64.7	64.7	64.7	65.0	65.1	15	00	68.2	9	36	19
66.4	65.4	64.8	64.8	64.8	64.8	64.8	64.8	65.0	65.1	15	00	67.0	9	42	20
66.7	65.5	64.8	64.8	64.9	64.8	64.8	64.8	65.3	64.8	16	00	66.7	10	00	21
66.7	65.4	65.0	64.8	64.7	64.7	64.7	64.8	65.3	65.0	13	36	67.7	10	00	22
66.7	65.5	65.0	64.8	64.7	64.7	64.8	64.9	65.4	65.2	14	36	67.8	10	10	23
65.7	65.4	64.8	64.8	64.8	64.7	64.7	64.7	64.9	65.1	13	00	67.8	10	13	24
66.7	65.7	65.5	65.4	64.9	64.8	64.8	64.8	65.3	65.2	14	00	67.9	10	35	25
66.5	66.5	65.3	64.9	64.7	64.5	64.6	64.6	65.0	65.1	14	00	68.0	10	49	26
67.2	65.8	65.4	65.4	64.1	64.6	64.6	64.7	64.8	65.0	14	00	68.4	10	38	27
66.7	65.5	65.5	65.3	64.9	64.9	64.9	64.9	64.9	64.8	14	42	67.7	10	39	28
66.2	65.4	64.9	65.2	64.9	64.7	64.8	64.7	64.8	65.3	14	00	67.9	10	24	29
66.7	65.6	65.1	65.0	64.8	64.8	64.7	64.8	65.6	64.9	14	00	67.5	10	00	30
65.9	65.6	65.4	65.4	64.8	64.9	64.9	65.0	65.1	65.4	13	00	68.0	9	48	31
66.4	65.5	65.0	64.8	64.7	64.6	64.6	64.7	64.9	64.9						
66.3	65.5	64.9	64.7	64.7	64.6	64.6	64.7	64.9	64.9						
66.4	65.5	64.8	64.7	64.6	64.6	64.7	64.7	64.9	64.8						

JANUARY, 1913.

28000γ PLUS TABULAR QUANTITIES.

Day	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h
1	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4	553	552	554	554	555	556	560	560	559	559	555	555	552	545	549
5	561	563	565	564	567	569	571	577	578	575	571	572	568	562	561
6*	566	567	569	570	571	573	574	571	565	560	566	563	559	558	559
7*†	569	568	570	571	569	571	576	576	572	571	578	579	574	569	568
8	572	572	576	576	576	577	581	585	575	566	563	555	562	568	571
9	571	573	576	577	575	574	580	582	577	580	572	574	571	577	576
10	557	556	565	567	568	570	572	564	554	543	559	560	542	555	553
11	556	559	560	563	562	561	564	564	559	564	559	547	545	549	554
12*†	565	566	567	569	571	573	575	572	563	556	551	553	556	556	559
13*	567	571	572	573	573	579	578	577	569	563	549	544	544	552	559
14	572	572	572	570	579	578	575	576	573	566	554	569	569	560	561
15	567	570	573	574	575	574	575	573	578	577	580	581	589	585	575
16*†	565	568	569	571	571	572	570	567	561	556	554	559	565	569	566
17	567	568	573	573	572	573	575	575	573	571	569	576	586	591	587
18	560	565	566	568	569	568	568	576	576	576	577	584	592	594	591
19	560	561	564	565	568	569	577	579	583	580	587	565	565	569	566
20	556	556	559	562	565	567	569	574	573	573	574	567	566	563	564
21*	560	559	561	563	567	566	571	578	580	581	583	578	571	571	572
22*	560	559	560	563	564	564	565	567	563	568	566	567	565	566	570
23	559	560	560	562	562	563	564	567	567	573	583	580	573	564	563
24*†	565	566	568	568	568	568	568	568	569	569	567	563	557	561	564
25	559	561	560	563	567	570	577	581	---	---	---	---	---	---	---
26	---	---	---	---	---	---	571	572	572	575	576	571	563	565	567
27*	573	572	574	576	572	571	570	564	554	546	549	550	546	550	555
28	564	566	570	571	573	574	573	570	588	560	562	552	542	549	551
29*	558	561	564	566	568	569	572	572	571	571	572	570	561	562	560
30	578	582	575	579	572	563	567	564	567	564	571	569	564	560	560
31	559	560	563	566	567	572	573	573	575	574	567	564	562	560	558
Mean.....	564	565	567	568	569	570	572	572	569	567	566	565	563	564	564
Mean*.....	565	566	567	569	569	571	572	571	567	564	564	563	560	561	563
Mean†.....	566	567	568	570	570	571	572	571	566	563	562	564	563	564	564

FEBRUARY, 1913.

28000γ PLUS TABULAR QUANTITIES.

1*	560	564	565	565	567	568	571	574	570	568	571	580	576	576	573
2*	572	573	575	579	578	578	581	584	586	587	585	581	572	572	572
3*†	569	570	575	576	577	578	586	592	592	593	598	597	590	584	581
4*†	574	573	573	577	579	580	585	588	587	581	583	582	577	577	573
5*	575	578	578	580	581	581	581	582	583	579	580	581	578	576	572
6*	575	575	575	576	575	575	579	580	578	576	579	579	579	577	581
7	565	567	569	571	572	571	577	580	581	579	573	572	568	566	572
8	571	573	573	574	576	576	578	581	579	577	566	556	551	555	561
9	565	565	566	572	575	577	582	587	587	578	562	550	555	567	573
10*	564	563	565	566	568	569	574	577	577	573	570	564	560	559	558
11	571	572	576	578	579	580	585	587	585	582	579	576	579	582	583
12	566	569	564	569	573	573	578	581	579	579	577	576	572	563	559
13	554	556	556	574	577	577	583	592	590	588	588	577	562	550	552
14	563	578	580	572	573	571	573	568	559	544	556	558	549	539	538
15	538	538	546	550	553	554	563	563	566	537	560	555	549	547	542
16	549	551	551	555	556	558	561	566	567	562	561	553	552	553	546
17	548	551	551	553	554	555	563	572	574	576	575	574	570	566	559
18	545	547	549	552	554	555	561	574	579	584	586	580	573	565	563
19	555	555	552	557	557	558	565	570	567	565	560	562	564	556	548
20	560	552	550	552	552	555	559	568	572	(562)	553	549	545	(539)	543
21	553	554	552	554	556	556	561	563	563	563	563	563	559	557	560
22*	556	555	556	559	558	558	560	563	566	566	563	555	553	557	560
23*†	559	559	565	564	565	567	566	564	566	567	570	567	560	559	563
24†	557	559	558	561	563	565	568	572	575	575	567	564	563	561	560
25	559	564	567	577	577	565	567	567	562	558	556	559	556	551	544
26	576	568	571	568	569	572	572	577	573	566	564	565	560	556	550
27	552	550	552	553	553	555	558	567	571	573	572	565	560	554	552
28*†	554	555	557	558	560	561	563	566	570	569	565	561	557	554	553
Mean.....	561	562	563	566	567	567	571	575	575	572	571	568	564	561	560
Mean*.....	566	566	568	570	571	572	575	577	578	576	576	575	570	569	569
Mean†.....	563	563	566	567	569	570	574	576	578	577	577	574	569	567	566

* Ten least disturbed days.

† Five international quiet days. Jan. 1 missing.

HOURLY VALUES OF HORIZONTAL INTENSITY.

53

JANUARY, 1913.

28000r PLUS TABULAR QUANTITIES.

16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean	Maximum			Minimum			Range	Day
r	r	r	r	r	r	r	r	r	r	h	m	r	h	m	r	r	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
556	557	557	556	554	554	553	555	558	555	7	00	560	14	12	542	18	4
563	564	564	563	563	567	564	566	566	567	8	33	578	0	00	558	20	5
564	566	566	566	566	564	564	563	568	566	7	00	574	13	25	557	17	6
569	568	570	571	571	570	571	571	571	571	11	21	580	0	17	568	12	7
574	575	574	574	572	569	569	572	570	572	7	45	585	12	21	555	30	8
574	574	569	567	563	544	554	558	558	571	7	36	583	21	00	544	39	9
550	550	556	556	558	558	558	557	557	558	7	00	572	9	39	540	32	10
560	561	563	563	562	565	565	563	563	560	21	48	565	13	07	544	21	11
566	570	570	567	566	564	565	565	567	565	7	18	576	11	15	546	30	12
570	580	582	581	579	576	572	570	571	569	18	00	582	12	10	543	39	13
563	566	567	565	563	563	563	563	562	568	5	29	581	11	08	554	27	14
569	568	570	570	568	568	566	564	563	573	12	53	590	0	00	562	28	15
565	567	569	569	570	568	567	568	568	566	6	00	572	10	45	553	19	16
580	576	570	569	569	572	570	558	557	573	14	19	592	23	35	555	37	17
563	542	554	550	537	547	553	553	559	566	13	39	595	20	09	532	63	18
560	556	556	553	563	562	560	559	558	565	9	17	586	19	00	553	33	19
563	553	552	550	554	555	555	558	553	562	11	23	576	17	27	550	26	20
569	566	565	559	558	558	559	563	559	567	11	09	585	0	00	553	32	21
569	568	563	561	559	559	559	558	560	563	15	00	570	21	30	555	15	22
565	564	563	559	558	559	566	565	567	565	11	24	584	1	36	556	28	23
564	561	558	557	562	562	558	559	560	564	10	10	570	13	23	556	14	24
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	25
569	570	571	572	572	568	567	574	573	...	11	00	576	13	00	563	13	26
559	563	567	566	563	562	561	563	564	562	4	10	578	10	00	546	32	27
561	571	570	571	563	563	559	558	558	563	7	20	575	13	00	542	33	28
559	565	569	570	576	573	570	571	571	568	19	50	576	0	00	558	18	29
557	557	554	552	556	556	554	558	558	564	2	10	585	22	13	552	33	30
563	561	563	561	556	556	556	558	560	564	9	15	576	20	25	553	23	31
564	564	565	564	563	562	562	562	563	566							27	
565	567	568	567	567	566	565	565	566	566							23	
566	566	567	566	564	564	565	564	565	566								

FEBRUARY, 1914.

28000r PLUS TABULAR QUANTITIES.

16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean	Maximum			Minimum			Range	Day
r	r	r	r	r	r	r	r	r	r	h	m	r	h	m	r	r	
571	568	567	566	566	566	567	569	571	569	12	19	581	0	00	560	21	1
567	564	566	568	569	569	569	570	569	574	9	25	590	17	00	564	26	2
581	576	574	575	575	575	575	576	576	581	11	19	598	0	25	568	30	3
570	571	572	571	569	570	570	570	573	576	8	28	588	16	12	569	19	4
569	564	565	567	568	569	570	571	574	575	9	06	584	17	30	564	20	5
576	567	561	563	565	564	564	565	565	573	14	54	582	18	00	561	21	6
571	568	563	563	563	564	564	565	569	570	8	45	582	19	00	563	19	7
564	559	559	563	564	561	564	563	565	567	8	00	581	12	30	549	32	8
574	568	566	563	564	563	564	565	565	569	8	35	589	12	25	548	41	9
558	559	562	562	567	568	567	568	570	566	8	35	578	14	15	557	21	10
581	578	578	577	575	576	580	576	566	578	8	00	587	24	00	566	21	11
567	569	568	556	546	545	545	549	552	566	7	22	582	21	00	545	37	12
559	563	565	567	565	564	564	559	564	569	8	05	593	14	16	543	50	13
542	546	549	552	545	550	536	534	530	554	2	03	582	23	37	528	54	14
545	547	551	549	544	542	537	546	548	550	8	42	567	0	15	529	38	15
545	543	543	545	545	546	548	548	550	552	9	06	568	17	09	541	27	16
553	548	549	548	552	549	550	546	546	558	11	40	577	22	56	544	33	17
561	558	558	556	554	555	555	557	557	562	11	17	587	1	00	545	42	18
546	532	536	545	548	550	550	552	551	554	7	40	570	17	15	528	42	19
551	555	555	557	558	556	555	559	553	554	8	50	572	(14 00)	(539)	33	20	
556	553	555	556	554	556	559	559	558	558	8	00	563	2	26	551	12	21
555	555	554	549	552	555	554	557	557	557	10	22	567	18	55	549	18	22
562	559	559	559	557	556	557	557	558	562	11	00	570	20	33	556	14	23
562	563	560	558	556	553	561	560	556	562	9	10	576	21	00	553	23	24
542	542	545	548	550	554	561	577	576	559	5	04	580	15	15	541	39	25
542	540	549	549	546	550	545	543	542	559	5	26	581	16	40	538	43	26
549	548	549	553	553	551	552	553	554	556	10	23	574	0	00	542	32	27
552	555	558	560	559	559	559	559	561	559	9	10	570	16	00	552	18	28
560	558	558	559	558	558	559	560	560	564							30	
566	564	564	564	565	565	565	566	567	569							21	
565	565	565	565	561	561	561	563	563	568								

MARCH, 1913.

28000_r PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1*†	560	558	560	565	568	570	575	579	580	579	574	567	558	553	553
2*†	560	560	560	563	568	569	573	575	573	573	573	570	564	560	557
3	560	558	559	561	565	569	576	579	579	573	573	567	570	567	(556)
4	551	547	547	554	552	552	561	573	580	577	581	586	587	580	573
5*	553	554	556	556	559	562	570	580	582	585	582	581	580	577	569
6	554	557	558	558	560	563	570	576	585	592	597	595	591	588	579
7	542	544	552	549	555	559	569	579	582	582	574	573	574	574	569
8	565	565	568	570	569	573	576	581	579	584	582	582	580	580	578
9*	556	557	562	565	563	565	575	578	585	585	584	585	583	577	574
10*†	561	563	(563)	(563)	(563)	(563)	564	569	571	569	567	567	568	563	566
11	559	560	562	562	565	570	571	566	568	570	575	574	575	580	570
12*	559	562	564	563	565	564	568	576	581	582	580	578	577	570	568
13	561	561	564	565	565	566	572	580	582	585	591	591	584	578	573
14	570	574	560	565	565	571	572	571	564	549	563	575	569	562	545
15	543	541	555	546	544	546	549	551	559	560	561	562	556	548	542
16	544	544	548	549	550	553	560	569	575	574	576	576	553	553	545
17	540	543	543	548	553	554	554	556	553	551	548	543	542	536	526
18	551	545	546	549	551	553	557	560	560	561	565	568	569	563	557
19	541	541	543	546	548	547	550	558	560	561	569	575	575	569	557
20*	547	547	548	548	552	548	549	553	558	562	569	573	574	567	560
21	570	556	549	552	554	562	561	563	560	563	568	568	565	556	557
22	536	543	544	548	548	547	551	558	564	567	577	577	567	557	551
23	557	563	563	565	567	574	579	583	581	577	568	567	566	559	552
24*	549	550	549	552	550	553	556	558	563	567	564	562	559	559	556
25*	552	553	553	555	556	558	560	563	562	559	555	543	546	560	558
26†	555	554	554	556	556	556	555	556	554	553	554	558	552	548	548
27*†	548	549	552	555	559	562	566	571	568	570	573	579	578	576	569
28	545	548	553	551	551	554	558	560	559	567	567	559	550	538	534
29	543	545	550	554	555	558	569	570	564	566	568	553	550	550	545
30	532	533	535	540	543	546	546	550	555	560	561	559	555	552	548
31	545	544	545	548	547	553	561	570	575	574	574	569	565	562	553
Mean.....	552	552	554	556	557	559	564	568	570	570	571	570	567	563	558
Mean*.....	554	555	557	558	560	561	566	570	572	573	572	570	569	567	563
Mean†.....	557	557	558	560	563	564	567	570	569	569	568	568	564	561	559

APRIL, 1913.

28000_r PLUS TABULAR QUANTITIES.

1	535	537	539	544	545	545	543	545	548	556	565	568	557	549	541
2	545	549	548	551	552	552	553	554	557	560	560	555	555	553	548
3*	552	553	557	560	562	561	561	555	555	552	558	562	562	561	558
4	556	556	556	557	558	556	559	560	564	568	569	564	560	558	555
5*	551	550	550	550	551	548	546	542	540	541	541	542	545	545	544
6*†	552	554	555	556	556	558	553	554	554	559	561	554	551	554	553
7*	558	559	560	560	561	560	559	565	565	566	564	556	552	553	555
8	556	557	557	557	559	559	560	562	559	559	557	553	555	555	558
9	539	535	537	541	547	552	564	557	541	540	552	541	518	493	480
10	523	526	522	520	526	524	539	545	544	546	538	530	527	526	527
11	526	526	529	531	531	531	535	544	547	553	550	545	543	533	528
12	535	527	525	525	529	534	546	556	559	564	552	548	556	536	526
13	520	522	523	528	526	528	535	541	545	550	552	553	548	542	534
14	524	524	526	528	528	532	529	533	537	541	541	541	534	527	526
15	537	529	529	526	530	535	534	535	538	542	541	540	534	531	537
16	(524)	(526)	(528)	(530)	(532)	(534)	538	535	539	545	552	550	541	532	527
17	534	546	539	535	537	537	535	534	534	532	539	542	537	532	524
18*	529	530	531	532	534	534	532	534	538	549	553	553	549	542	534
19	533	530	530	532	534	536	536	536	540	546	544	546	547	543	541
20*†	539	537	537	539	540	543	546	552	558	562	559	549	547	545	541
21*†	540	541	540	544	542	542	541	544	552	558	563	560	556	556	559
22*†	538	540	540	543	544	543	542	542	538	540	544	546	551	554	547
23	535	551	539	542	541	541	538	537	543	551	554	555	557	553	550
24*	541	540	542	542	543	543	545	551	563	565	562	557	551	550	547
25*	541	540	543	541	539	539	541	550	562	568	567	563	552	546	545
26†	541	542	543	544	545	544	546	550	560	565	567	564	561	557	550
27	542	546	546	547	547	551	554	554	560	568	571	564	562	560	550
28	525	536	531	532	532	530	528	533	540	549	550	547	538	533	531
29	536	537	536	542	537	536	533	541	547	548	549	544	537	534	531
30	535	536	535	535	538	541	548	555	557	552	546	543	539	535	529
Mean.....	538	539	539	540	542	542	544	547	549	553	554	551	547	543	539
Mean*.....	544	544	546	547	547	547	547	549	552	556	557	554	552	551	548
Mean†.....	542	543	543	545	545	546	546	548	552	557	559	555	553	553	550

* Ten least disturbed days.

† Five international quiet days.

HOURLY VALUES OF HORIZONTAL INTENSITY.

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MARCH, 1913.

28000 γ PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	h	m	γ	h	m	γ	γ	
551	553	557	558	558	560	559	560	560	563	9	20	581	15	30	549	32	1
556	558	560	562	561	560	562	561	560	564	8	00	575	15	06	555	20	2
547	543	545	548	545	547	548	547	545	559	8	20	580	16	30	542	38	3
566	557	553	555	557	555	558	555	553	563	12	15	590	2	09	545	45	4
560	555	554	555	555	555	556	555	558	565	10	00	585	0	00	553	32	5
570	557	558	553	549	546	547	538	537	566	11	15	597	23	35	536	61	6
565	565	562	561	562	561	563	563	565	564	8	48	583	0	00	537	46	7
571	552	543	541	547	552	553	553	553	567	8	30	584	18	20	538	46	8
568	564	563	560	559	558	560	561	562	569	11	30	586	0	00	553	33	9
564	558	557	556	554	555	556	556	557	562	9	00	571	20	00	554	17	10
564	563	556	552	550	555	559	561	561	564	13	10	581	19	40	549	32	11
565	564	566	565	563	563	562	561	559	568	9	32	585	1	00	559	26	12
571	570	571	567	567	569	567	566	566	572	11	25	593	0	00	559	34	13
535	525	526	535	540	548	536	543	547	555	0	07	584	17	45	522	62	14
534	529	531	525	525	537	546	542	549	545	11	20	562	20	22	520	42	15
528	531	540	531	540	526	538	535	540	549	11	20	579	16	35	523	56	16
530	539	545	545	545	545	545	544	549	545	8	10	559	15	00	526	33	17
552	549	551	547	542	540	554	547	540	553	12	08	571	21	28	538	33	18
553	549	550	549	550	550	548	548	547	554	12	25	576	1	40	539	37	19
555	548	545	543	544	543	544	544	547	553	13	00	574	21	15	543	31	20
551	536	538	540	546	541	540	540	538	553	0	49	572	16	30	535	37	21
542	541	544	541	536	555	549	553	552	552	11	30	579	0	56	534	45	22
553	552	550	553	545	545	546	547	551	561	8	00	583	20	40	542	41	23
553	550	547	548	548	548	550	552	554	554	10	00	567	19	43	547	20	24
555	554	554	553	552	550	550	549	550	554	8	00	563	12	12	540	23	25
548	548	550	551	548	547	546	544	544	551	12	00	558	22	38	543	15	26
567	564	562	561	558	557	554	553	548	562	12	30	580	0	00	544	36	27
542	548	551	548	546	550	547	542	541	550	11	00	567	14	38	533	34	28
541	538	538	540	540	537	538	556	538	550	7	30	572	22	20	532	40	29
537	533	531	536	541	544	544	545	545	545	11	12	562	17	50	529	33	30
547	542	531	523	533	526	533	533	547	550	9	05	576	19	00	523	53	31
553	550	549	548	549	549	550	550	550	558							37	
559	557	556	556	555	555	555	555	555	561							27	
557	556	557	558	555	555	555	555	555	561								

APRIL, 1913.

28000 γ PLUS TABULAR QUANTITIES.

529	536	541	541	539	541	544	541	542	545	11	55	568	16	15	527	41	1
545	545	548	551	551	550	552	551	553	552	10	50	561	0	08	542	19	2
557	549	550	553	559	560	560	559	554	557	12	55	563	17	00	549	14	3
552	550	552	549	541	542	547	549	553	555	11	34	572	20	00	541	31	4
545	545	549	551	552	554	554	554	553	548	22	00	554	9	00	540	14	5
552	558	561	561	559	559	559	559	559	556	11	00	561	12	50	550	11	6
553	551	552	553	554	556	555	553	554	557	10	00	566	18	01	551	15	7
571	576	562	559	559	558	554	544	547	558	17	00	576	22	48	542	34	8
508	491	494	497	489	509	514	511	515	524	7	35	574	15	00	480	94	9
524	519	521	522	515	520	521	526	519	527	8	28	548	20	45	515	33	10
521	518	524	528	524	524	523	537	538	533	10	30	555	17	15	517	38	11
523	513	499	505	507	515	537	527	524	532	9	55	568	18	28	489	79	12
528	529	532	533	532	532	531	534	532	535	12	00	553	1	20	520	33	13
525	527	530	534	534	536	540	535	543	532	23	30	547	1	10	523	24	14
537	520	505	507	520	517	522	523	(522)	529	11	20	543	18	10	500	43	15
521	518	521	527	530	531	533	533	532	532	10	40	552	17	22	514	38	16
521	518	521	519	529	527	527	528	531	532	2	20	548	19	08	516	32	17
526	523	524	526	531	533	532	531	533	535	10	30	553	17	00	523	30	18
531	526	532	534	539	542	543	544	544	538	13	20	548	16	50	525	23	19
535	535	538	541	541	542	544	543	543	544	10	08	562	16	30	534	28	20
553	546	542	538	536	533	536	543	539	546	11	00	563	21	10	531	32	21
542	540	541	537	536	538	541	541	538	542	14	00	554	20	22	534	20	22
543	536	535	535	540	540	540	542	543	543	12	40	559	1	00	535	24	23
541	530	539	540	540	540	542	543	543	546	9	30	566	17	00	530	36	24
542	541	540	542	541	540	539	542	541	546	10	10	569	20	45	538	31	25
541	536	539	538	540	540	541	540	540	547	10	35	569	17	00	536	33	26
533	530	535	533	530	535	538	533	523	546	10	35	573	23	40	522	51	27
528	527	529	531	535	535	535	538	537	535	10	55	551	0	00	523	28	28
527	526	530	534	535	535	536	536	536	537	10	35	549	16	35	523	26	29
522	523	531	531	533	534	537	540	541	538	9	00	557	16	00	522	35	30
536	533	534	535	536	537	539	539	539	542							33	
545	542	544	544	545	546	546	547	546	548							23	
545	543	544	543	542	542	543	545	544	547								

MAY, 1913.

28000 γ PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1	541	542	540	540	539	538	545	558	569	568	563	557	555	547	537
2	537	540	542	542	541	543	541	543	554	561	562	559	554	548	539
3	546	543	541	544	541	543	533	543	555	558	541	547	538	535	532
4	546	551	554	546	541	542	542	547	556	562	562	542	523	517	512
5	514	511	522	522	515	516	526	533	544	547	542	539	528	515	510
6	...	...	...	...	...	...	526	533	545	547	531	517	515	526	529
7	522	521	517	521	518	524	528	527	532	532	532	527	525	522	518
8	531	527	529	528	528	528	536	543	545	547	545	539	533	530	529
9	528	529	529	526	526	524	522	525	537	544	543	541	531	525	523
10	526	521	521	523	522	524	522	522	524	523	519	517	509	508	507
11*	528	530	528	529	531	533	535	534	540	545	543	540	530	525	518
12*	529	530	530	533	534	534	535	540	545	547	540	532	523	520	513
13*	525	526	529	530	530	533	536	544	552	556	547	543	535	529	521
14*†	533	533	538	536	536	538	544	550	565	573	578	573	561	549	536
15*	531	532	534	535	542	546	547	553	557	557	553	553	541	535	523
16*	528	532	529	530	530	530	535	542	550	555	552	548	541	530	522
17	532	533	533	535	533	534	531	535	545	547	547	543	535	533	530
18	539	539	540	545	545	548	545	547	559	563	572	565	559	552	547
19	543	540	535	536	536	535	533	539	552	559	558	550	541	536	530
20*†	536	532	530	531	532	531	533	540	546	551	555	553	543	537	528
21*†	533	534	535	536	537	537	535	537	547	550	551	546	542	536	528
22*†	533	533	534	535	533	531	526	534	554	560	557	553	546	539	532
23†	538	540	541	541	539	536	530	533	546	560	560	549	542	538	535
24	544	544	544	544	540	538	540	543	548	548	551	552	551	546	538
25	530	532	532	534	532	529	527	527	531	535	536	532	528	530	527
26*	532	532	533	533	532	533	535	539	552	555	556	551	542	533	530
27	534	535	537	539	542	539	529	527	533	537	542	543	538	531	526
28	533	536	537	537	535	537	537	540	552	556	556	547	533	528	524
29	531	530	532	530	530	527	524	532	552	559	567	568	557	545	534
30	534	534	536	536	535	537	539	547	556	563	552	546	542	528	519
31	529	528	531	532	534	535	535	541	539	562	564	556	546	540	534
Mean.....	534	534	534	535	534	535	535	539	549	553	552	547	539	534	527
Mean*.....	531	531	532	533	534	535	536	541	551	555	553	549	540	533	525
Mean†.....	535	534	536	536	535	535	534	539	552	559	560	555	547	540	532

JUNE, 1913.

28000 γ PLUS TABULAR QUANTITIES.

1	555	553	548	538	530	536	538	542	543	551	549	546	545	534	536
2	507	515	517	516	519	516	522	505	512	517	520	513	511	515	519
3	530	526	528	535	529	527	527	527	531	528	527	528	533	530	522
4	523	524	529	529	525	524	523	522	533	541	550	558	550	543	534
5	523	520	522	523	524	523	517	516	525	538	539	544	538	532	523
6*	531	529	530	530	528	527	521	524	540	549	559	557	551	538	528
7*†	525	524	525	526	526	525	525	528	534	542	549	547	544	536	528
8*†	530	530	530	531	532	534	532	533	540	544	541	539	535	535	530
9	531	532	530	535	532	531	527	530	541	548	554	553	546	535	528
10	521	526	528	530	532	535	536	538	543	547	547	541	529	525	522
11*†	529	529	529	531	531	529	530	530	534	536	537	538	535	536	532
12*†	533	533	533	533	534	534	531	535	542	543	542	543	543	541	536
13	530	534	535	536	536	536	532	537	547	555	552	547	538	530	528
14	532	529	528	531	535	539	541	545	557	565	569	560	554	551	545
15	530	527	527	530	533	539	540	541	547	556	561	552	550	548	540
16	534	536	534	540	531	529	529	528	537	544	547	549	544	538	529
17*	531	529	531	531	527	525	526	536	553	565	568	561	549	546	539
18*	529	530	528	530	530	531	528	532	548	559	559	555	546	542	537
19	532	533	533	532	532	532	533	535	546	560	564	556	560	554	547
20*	531	529	531	531	531	534	538	539	542	549	551	553	548	548	541
21	529	531	530	530	530	532	526	526	537	541	549	550	553	551	553
22*	529	530	530	530	532	532	528	531	535	543	545	537	531	526	526
23	528	529	528	528	533	535	536	539	544	547	549	551	549	543	537
24	534	534	537	541	537	537	539	544	546	548	545	548	545	538	533
25*	536	536	537	536	532	533	532	534	540	542	547	542	544	542	538
26	533	536	537	535	535	537	535	528	528	533	536	532	526	526	525
27†	524	526	527	529	531	534	532	531	539	547	550	545	545	544	534
28	529	528	526	527	528	534	535	542	553	563	561	559	555	548	539
29	514	519	522	523	526	523	525	526	532	536	536	535	529	522	518
30	521	527	522	520	522	525	526	528	533	535	535	535	534	532	526
Mean.....	529	529	530	531	530	531	530	532	539	546	548	546	542	538	532
Mean*.....	530	530	530	531	530	530	529	532	541	547	550	547	543	539	532
Mean†.....	528	528	529	530	531	531	530	531	538	542	544	543	540	538	532

*Ten least disturbed days.

†Five international quiet days.

HOURLY VALUES OF HORIZONTAL INTENSITY.

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MAY, 1913.

28000_r PLUS TABULAR QUANTITIES.

16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean	Maximum			Minimum			Range	Day
<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>r</i>	
534	535	539	540	540	540	540	540	539	545	9	05	570	16	00	534	36	1
538	536	540	543	547	548	547	548	544	546	10	10	562	16	39	534	28	2
528	532	536	538	538	540	542	543	548	541	9	55	559	16	00	528	31	3
518	521	523	523	523	529	543	532	523	537	10	27	564	14	37	509	55	4
512	512	513	533	...	...	...	...	...	...	9	45	548	1	50	510	38	5
523	504	506	502	525	512	531	514	531	...	21	27	550	17	35	494	56	6
514	514	514	521	521	519	527	534	530	523	9	30	535	14	15	511	24	7
522	520	520	522	524	525	526	529	528	531	10	15	548	17	15	517	31	8
520	518	519	518	523	518	512	510	518	525	10	10	544	22	52	508	36	9
513	519	523	521	520	520	520	523	525	520	0	40	528	14	55	506	22	10
517	520	522	518	520	524	525	528	529	529	10	22	545	18	48	515	30	11
519	526	526	524	521	520	518	521	529	529	9	50	547	15	03	512	35	12
523	532	537	533	530	529	531	532	532	534	9	50	557	15	23	517	40	13
527	531	538	541	539	539	536	537	533	544	11	00	578	16	00	527	51	14
518	522	530	530	529	529	529	529	532	537	9	35	558	15	48	517	41	15
518	521	528	532	538	537	534	530	536	534	10	15	555	16	00	518	37	16
529	530	533	535	536	537	538	540	540	536	10	45	548	16	00	529	19	17
536	532	535	538	539	539	539	539	538	546	11	10	573	17	28	530	43	18
527	526	529	528	533	530	532	533	534	537	10	20	560	16	30	524	36	19
519	522	529	532	532	532	534	537	535	535	10	30	556	16	00	519	37	20
525	525	531	531	533	534	534	534	534	536	11	08	552	16	15	524	28	21
531	529	530	533	535	535	536	537	538	538	10	00	560	7	00	526	34	22
533	533	537	541	544	546	545	546	544	542	10	15	561	7	25	530	31	23
526	529	536	539	537	535	532	529	535	540	11	40	553	16	00	526	27	24
523	526	529	529	530	528	530	530	530	530	10	27	537	16	00	523	14	25
530	531	534	534	535	534	532	532	532	537	10	18	556	0	00	530	26	26
521	524	528	532	535	537	535	533	533	534	10	53	544	16	00	521	23	27
525	528	532	534	534	534	529	529	529	536	10	50	557	15	00	524	33	28
531	521	523	529	529	533	537	535	536	537	11	30	568	17	42	519	49	29
515	516	524	528	530	531	529	529	530	534	9	00	556	16	00	515	41	30
531	532	536	538	534	540	542	548	551	541	10	17	564	0	36	526	38	31
525	526	530	531	532	532	533	533	534	536							35	
523	526	530	531	531	531	531	532	533	535							36	
527	528	533	536	533	532	533	535	535	538								

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28000_r PLUS TABULAR QUANTITIES.

534	530	510	522	514	541	495	500	500	533	1	29	559	22	08	493	66	1
518	518	521	524	526	522	521	522	525	518	20	00	526	0	05	500	26	2
518	516	521	522	519	520	525	532	527	526	12	52	535	17	00	516	19	3
524	518	516	514	523	520	517	521	523	528	12	00	558	19	00	514	44	4
518	520	523	525	528	527	530	532	533	527	12	12	545	7	35	515	30	5
522	522	523	523	525	527	527	525	526	532	11	10	560	15	28	508	52	6
527	524	524	525	525	525	526	527	528	530	11	00	549	17	00	524	25	7
527	532	536	536	536	533	533	531	531	534	10	00	544	16	00	527	17	8
528	531	532	527	522	516	519	519	519	532	11	22	555	21	00	516	39	9
519	520	521	524	528	530	529	529	528	530	10	32	550	16	00	519	31	10
525	524	524	531	533	533	532	531	532	531	12	00	538	17	15	523	15	11
526	523	526	531	532	532	532	533	533	534	12	25	544	17	04	522	22	12
530	533	530	532	534	535	533	532	531	536	10	00	555	16	30	524	31	13
539	537	542	542	541	541	541	531	527	543	11	00	569	23	18	526	43	14
529	523	526	531	529	532	532	534	535	537	10	40	563	17	12	523	40	15
527	525	528	532	534	534	533	533	532	534	12	00	549	16	48	524	25	16
532	525	524	527	527	526	529	531	533	536	10	43	569	17	30	523	46	17
531	530	529	529	529	530	529	530	531	536	10	28	560	1	26	529	31	18
529	516	517	527	531	531	532	536	530	537	13	40	564	17	15	508	56	19
531	521	523	525	525	527	528	530	530	535	11	25	555	17	15	521	34	20
545	540	535	535	528	525	527	527	529	536	13	19	558	20	47	525	33	21
524	527	529	530	529	528	527	530	533	531	11	02	545	16	00	524	21	22
532	527	529	532	533	534	534	536	536	536	12	07	551	17	35	525	26	23
528	532	532	535	537	536	536	534	537	538	11	57	549	16	15	526	23	24
522	524	527	531	533	533	533	533	534	535	11	15	547	16	25	521	26	25
524	524	528	530	529	527	525	527	525	530	3	44	539	16	25	522	17	26
526	522	527	528	527	525	525	525	527	532	10	30	551	16	30	521	30	27
534	537	526	522	525	527	526	526	531	537	10	04	564	19	13	521	43	28
515	517	517	524	525	523	520	520	521	524	10	42	537	1	00	514	23	29
517	519	518	520	521	521	522	523	523	525	12	18	538	16	25	515	23	30
527	525	525	528	529	529	529	530	531	532							32	
526	525	527	530	528	528	528	528	528	532							29	

JULY, 1913.

28000 γ PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1	524	523	523	525	524	525	521	516	515	515	516	513	514	520	520
2	522	521	520	521	519	524	529	537	537	540	540	537	532	532	530
3*	523	523	522	521	520	523	520	522	519	520	520	522	524	524	518
4†	522	524	522	522	523	524	525	524	527	535	540	542	541	540	535
5	524	524	524	526	526	529	530	528	532	536	540	538	535	534	529
6*	525	527	525	526	527	528	527	527	531	534	532	531	533	535	532
7	526	526	527	527	526	528	527	530	532	532	533	532	527	527	527
8*	524	527	524	523	524	525	521	516	519	527	530	531	531	530	531
9*†	521	522	523	523	524	526	525	523	521	527	530	531	530	531	530
10*	521	522	525	526	527	526	528	530	533	536	532	534	533	534	527
11	522	523	522	522	522	521	523	524	527	531	531	529	527	527	524
12	527	526	527	532	535	543	542	535	526	534	534	539	535	528	518
13	516	515	517	520	522	525	529	528	534	547	548	550	547	544	536
14	519	520	518	518	519	521	521	520	519	523	529	529	526	521	519
15	521	522	522	521	521	523	527	534	536	537	536	528	520	522	522
16	520	520	520	520	520	519	520	518	518	519	519	519	517	518	518
17*†	522	520	517	517	517	518	518	514	519	522	521	525	524	524	522
18*	523	523	522	522	521	521	521	520	522	524	529	530	529	527	524
19*†	521	521	521	521	520	520	519	524	531	533	534	530	525	523	518
20	519	519	523	523	522	523	522	527	531	536	541	535	531	526	519
21	521	517	518	517	517	517	521	526	528	528	(530)	(529)	(525)	(521)	(518)
22	518	519	517	517	518	519	522	523	525	525	526	523	522	521	520
23	518	519	517	517	517	518	520	519	522	524	527	527	517	508	507
24	511	513	516	515	(519)	(520)	(522)	523	529	532	537	533	531	527	520
25	520	528	536	541	539	523	524	530	532	527	518	511	502	498	494
26	509	506	509	509	512	514	508	509	510	513	511	512	515	513	507
27	510	509	511	511	511	514	517	524	532	537	537	527	522	514	508
28*†	514	515	516	516	518	521	523	529	541	542	541	536	521	516	518
29	513	510	512	512	515	520	524	524	535	536	533	529	520	523	521
30	511	511	510	514	517	517	514	512	522	525	525	522	520	519	512
31*	512	513	511	510	512	511	514	524	534	537	532	523	513	505	503
Mean.....	519	520	520	520	521	522	523	524	527	530	531	529	525	524	520
Mean*.....	521	521	521	520	521	522	522	523	527	530	530	529	526	525	522
Mean†.....	520	520	520	520	520	522	522	523	528	532	533	533	528	527	525

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28000 γ PLUS TABULAR QUANTITIES.

1*†	513	512	511	511	514	514	517	518	526	531	537	531	524	514	509
2*	520	521	519	519	515	515	517	523	533	539	544	538	526	521	519
3*	520	518	516	514	511	510	508	505	516	524	527	530	522	515	510
4	517	517	517	517	517	523	526	539	549	553	549	543	531	521	511
5*†	512	510	511	512	511	510	508	508	517	516	523	525	522	520	516
6	514	514	518	517	516	515	517	516	520	523	515	500	496	500	509
7	512	511	512	513	512	514	520	521	518	526	520	520	524	528	527
8	509	511	511	512	513	514	515	516	518	518	520	523	518	515	504
9	512	514	512	510	505	502	501	500	515	527	522	519	515	512	504
10	502	500	501	502	501	501	497	501	511	519	522	519	507	499	495
11	500	505	510	504	507	511	506	505	513	517	515	509	499	495	499
12	510	502	498	499	505	507	506	510	512	514	508	500	491	488	490
13	501	498	496	496	496	504	506	514	516	518	516	508	499	492	492
14	499	501	502	503	502	502	502	508	517	527	522	512	509	508	502
15	511	507	507	507	510	509	504	508	517	522	524	525	517	510	509
16	509	517	510	503	502	503	496	490	495	499	507	516	521	512	507
17	503	503	502	499	500	498	499	502	509	518	517	514	509	502	497
18	502	503	502	504	505	498	495	499	509	515	516	518	517	512	506
19*	500	502	499	499	498	497	495	500	508	509	503	502	501	499	496
20*†	504	505	504	504	506	507	511	516	516	522	521	517	520	518	506
21*	502	503	505	506	505	507	513	514	527	538	534	526	518	511	505
22*	508	510	509	511	510	510	514	515	518	522	523	520	514	507	502
23	502	505	506	511	511	512	514	504	516	516	511	506	504	498	493
24	497	499	498	500	501	500	497	499	515	529	525	518	511	503	497
25	500	500	501	502	507	508	509	518	526	530	522	513	501	500	498
26	506	507	509	508	508	509	509	505	508	509	(516)	521	514	509	511
27	501	500	501	501	503	503	508	509	516	523	521	518	514	509	506
28	500	502	503	502	503	505	508	519	525	529	529	522	513	499	490
29*†	496	496	497	499	500	499	492	503	515	515	511	500	497	488	486
30*†	499	499	498	500	501	503	498	498	501	504	506	497	491	488	491
31	500	502	501	501	500	504	512	517	522	526	522	522	496	489	490
Mean.....	506	506	506	506	506	507	507	510	517	522	521	517	511	506	502
Mean*.....	507	508	507	508	507	507	507	510	518	522	523	519	514	508	504
Mean†.....	505	504	504	505	506	507	505	509	515	518	520	514	511	506	502

*Ten least disturbed days.

†Five international quiet days.

HOURLY VALUES OF HORIZONTAL INTENSITY.

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JULY, 1913.

28000_r PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>r</i>	
521	521	519	522	522	522	522	524	528	521	24	00	528	12	32	511	17	1
528	524	523	525	526	524	521	523	522	527	11	00	540	5	00	519	21	2
518	516	518	522	523	523	524	523	524	521	13	30	525	17	17	516	9	3
529	524	522	522	524	524	525	525	527	528	12	18	543	19	00	522	21	4
528	522	524	526	524	521	521	523	526	528	10	33	540	21	30	518	22	5
528	524	525	529	529	528	527	526	526	528	13	35	536	17	15	522	14	6
527	527	525	526	527	526	525	525	525	528	10	24	534	23	20	524	10	7
524	521	522	524	522	523	523	522	522	524	11	22	531	8	00	516	15	8
526	522	521	521	520	523	522	522	522	524	11	45	531	20	00	520	11	9
522	521	522	523	525	525	524	525	525	527	10	00	536	17	22	519	17	10
524	523	522	525	524	522	522	522	524	524	11	00	531	0	45	521	10	11
518	514	513	513	517	517	517	518	517	526	6	38	544	18	40	512	32	12
528	527	529	525	521	522	520	520	523	529	11	50	550	1	30	515	35	13
520	519	519	521	520	521	521	520	521	521	11	18	530	3	00	518	12	14
522	514	512	515	519	520	524	522	521	523	10	00	537	18	00	512	25	15
517	517	519	519	519	520	520	521	521	519	23	00	521	16	00	517	4	16
521	520	520	521	522	523	523	523	524	521	12	00	525	8	00	514	11	17
523	520	517	520	520	520	520	521	522	523	12	00	530	18	06	517	13	18
516	513	516	518	517	516	516	521	520	521	11	00	534	17	00	513	21	19
511	509	505	508	510	512	507	510	514	520	11	00	541	17	38	504	37	20
(517)	515	515	518	518	518	518	519	519	520	(11 00)	(530)	0	00	514	16	21	
521	516	516	518	518	517	516	518	518	520	11	00	526	21	45	515	11	22
506	506	506	509	510	510	512	514	512	515	11	50	528	16	00	506	22	23
511	519	528	525	524	524	524	521	525	523	11	30	538	15	45	509	29	24
503	506	503	502	505	506	505	511	510	516	5	07	541	14	34	492	49	25
504	506	509	513	512	513	513	513	510	510	12	07	515	15	26	503	12	26
508	509	511	512	511	512	513	514	514	516	11	00	537	0	25	507	30	27
521	518	518	521	521	521	520	514	519	522	9	41	544	23	36	510	34	28
513	508	511	519	516	514	515	514	514	519	10	08	536	1	23	508	28	29
508	505	510	510	509	508	513	515	515	514	10	28	526	16	35	503	23	30
507	510	513	515	516	517	517	518	514	516	9	27	537	14	47	502	35	31
518	517	517	519	519	519	519	520	520	522							21	
521	518	519	521	522	522	522	522	522	523							18	
523	519	519	521	519	520	520	520	521	523								

AUGUST, 1913.

28000_r PLUS TABULAR QUANTITIES.

510	509	513	517	515	516	517	517	518	517	10	50	537	16	10	508	29	1
520	518	523	523	523	512	514	518	520	522	11	00	544	21	39	511	33	2
503	506	511	512	511	513	513	515	518	514	12	00	530	16	00	503	27	3
515	519	511	516	516	517	513	513	515	524	10	00	553	15	42	509	44	4
512	512	514	516	514	511	511	507	512	514	11	51	525	21	22	506	19	5
513	511	512	510	508	507	510	510	511	512	10	00	523	12	40	495	28	6
519	514	511	510	510	509	509	509	510	516	14	47	529	22	00	509	20	7
497	497	502	506	506	507	504	509	505	510	12	00	523	16	20	495	28	8
500	489	484	487	485	495	498	499	500	504	10	00	527	18	00	484	43	9
487	492	495	501	500	502	502	504	503	503	11	24	524	15	46	485	39	10
503	501	498	501	504	503	502	500	503	505	10	22	520	13	22	492	28	11
495	493	485	494	497	496	500	494	508	500	10	00	514	17	53	484	30	12
492	487	493	497	499	498	500	501	501	501	9	40	519	17	00	487	32	13
497	491	497	503	504	506	506	506	512	506	10	00	527	16	55	491	36	14
502	502	502	499	499	501	502	506	510	509	11	31	525	19	40	494	31	15
497	492	493	496	491	491	497	498	501	502	12	57	522	20	06	490	32	16
495	498	505	507	505	505	506	503	502	504	10	20	519	15	49	493	26	17
502	499	500	502	498	496	498	497	497	504	11	52	519	6	37	493	26	18
493	489	497	499	499	501	502	503	502	500	9	55	510	16	42	488	22	19
501	501	503	505	511	510	507	507	505	509	10	23	523	16	00	501	22	20
502	499	504	508	508	507	507	507	507	511	10	11	539	17	00	499	40	21
504	504	509	509	507	505	504	503	501	510	10	50	523	24	00	501	22	22
483	481	492	497	499	485	488	491	494	501	9	24	518	17	00	481	37	23
495	494	496	497	498	498	498	500	500	503	10	00	529	16	41	493	36	24
496	497	499	501	501	503	504	510	509	506	10	00	530	16	00	496	34	25
507	506	508	508	507	505	503	501	501	508	12	16	523	24	00	501	22	26
499	498	503	503	504	504	503	500	499	506	10	17	524	17	00	498	26	27
485	485	490	492	491	495	497	495	497	503	10	17	530	16	35	483	47	28
489	491	497	498	499	499	500	503	502	499	9	43	516	14	35	486	30	29
495	499	504	504	504	504	505	504	504	500	10	40	507	14	07	485	22	30
496	500	503	505	504	505	505	505	507	506	10	20	527	14	15	488	39	31
500	499	502	504	504	503	504	504	506	507							31	
503	503	508	509	509	508	508	508	509	510							27	
501	502	506	508	505	506	506	506	506	507								

SEPTEMBER, 1913.

28000 γ PLUS TABULAR QUANTITIES.

Day	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h
1	510	507	508	511	509	505	508	519	524	521	511	501	492	485	488
2	493	495	496	495	492	493	483	479	489	496	497	496	497	497	494
3*	493	492	494	491	496	493	493	501	514	522	515	509	501	489	488
4*†	494	494	495	496	495	496	498	495	492	492	497	507	508	501	500
5	495	495	498	500	502	504	501	501	502	506	505	501	496	494	491
6	504	503	502	502	502	504	500	499	503	499	497	486	485	469	474
7	490	493	490	488	483	490	498	501	501	500	495	494	490	487	488
8	474	477	501	484	484	497	480	490	497	492	496	489	484	477	478
9	496	482	485	486	482	492	499	500	505	504	493	478	471	471	475
10	481	484	480	485	486	487	490	486	492	496	494	492	491	487	473
11	481	478	485	477	480	482	483	486	489	494	494	494	495	487	479
12	487	485	488	491	493	490	489	494	495	498	496	496	497	486	475
13	489	487	489	488	483	482	483	485	491	498	500	500	488	480	476
14	---	---	---	---	---	---	---	495	497	499	501	494	492	488	483
15†	494	493	488	484	483	486	493	499	497	497	498	499	497	495	486
16*	493	488	487	488	487	488	491	502	509	511	512	507	500	500	494
17*	491	490	492	494	496	494	492	495	499	501	514	514	518	506	495
18	496	501	504	504	509	512	509	506	501	499	505	501	505	499	494
19	485	485	485	488	490	493	492	488	483	484	490	491	494	489	488
20*†	492	493	492	493	495	496	501	503	503	504	510	510	504	498	495
21*	490	492	492	494	494	497	499	499	500	502	507	504	499	495	491
22	493	493	496	495	498	511	508	514	508	508	501	490	479	478	479
23	468	479	481	483	487	491	490	489	490	483	477	478	484	481	475
24	483	485	487	490	494	495	491	489	484	477	479	485	491	489	489
25	483	488	491	496	497	498	499	491	488	486	486	482	481	477	477
26*	487	489	492	491	492	498	503	504	508	506	501	500	496	494	484
27*†	490	490	490	490	490	489	489	492	492	494	494	487	482	476	479
28*	493	485	483	491	492	493	499	500	497	492	489	488	488	485	485
29*†	490	489	489	490	493	491	490	490	493	498	500	499	496	492	487
30	494	494	492	493	492	494	496	497	499	502	506	501	493	478	477
Mean.....	490	490	492	492	493	495	495	497	498	499	499	496	493	488	485
Mean*.....	491	490	491	492	493	494	496	498	501	502	504	502	499	494	490
Mean†.....	492	492	491	491	491	492	494	496	495	497	500	500	497	492	489

OCTOBER, 1913.

28000 γ PLUS TABULAR QUANTITIES.

1	481	485	487	488	489	489	490	489	490	495	507	515	508	497	489
2*†	491	489	490	489	491	495	494	490	486	482	485	491	491	488	483
3*†	488	489	488	492	493	493	498	503	501	495	497	498	494	489	489
4	490	491	491	492	493	490	488	491	489	491	497	504	500	493	493
5	475	457	463	470	473	473	470	462	465	471	468	464	460	454	451
6	458	481	470	477	477	472	472	460	461	469	473	477	467	457	453
7	466	465	467	472	471	472	473	477	471	475	463	468	464	456	436
8	471	462	465	478	475	469	473	475	475	467	455	460	467	462	446
9	468	469	469	472	475	475	477	480	486	488	486	485	485	468	460
10	481	480	471	473	474	482	476	474	487	487	481	463	460	455	444
11	473	467	469	471	472	475	475	477	481	480	478	477	469	456	451
12	471	473	473	474	477	477	476	477	480	485	484	478	472	467	467
13	471	472	478	478	477	478	476	477	476	477	477	474	466	463	463
14	471	473	473	474	476	477	475	477	481	481	485	487	487	483	480
15	476	478	482	482	486	489	484	479	480	484	489	492	492	479	472
16*	474	479	479	476	479	481	486	488	492	493	497	498	495	487	480
17*	477	478	479	479	481	479	478	479	478	482	487	487	480	476	475
18	480	482	482	493	497	500	497	496	496	497	498	501	496	467	441
19	447	452	456	456	463	466	476	482	485	488	485	484	480	476	468
20	466	460	463	465	478	478	485	491	493	490	490	480	475	465	463
21	469	472	476	476	475	477	478	477	478	481	486	484	481	477	475
22*	477	476	475	476	480	480	478	477	481	489	496	496	488	484	482
23*†	478	478	480	481	483	483	485	484	481	482	485	486	478	472	473
24*†	480	481	483	484	485	485	488	488	489	493	491	483	478	477	475
25	479	477	478	478	477	478	484	488	491	487	487	487	488	487	479
26	473	473	472	475	476	475	478	480	480	479	482	475	470	467	463
27	479	479	480	480	479	481	486	489	488	486	484	480	475	472	470
28*†	481	478	478	480	480	481	484	487	489	487	493	492	485	480	474
29*	477	479	480	479	(480)	(481)	(484)	488	488	490	491	487	482	480	477
30	476	479	477	477	478	481	479	481	485	487	490	491	490	481	473
31	457	464	465	467	475	474	481	483	483	483	488	483	473	466	462
Mean.....	474	475	475	478	480	480	481	482	483	485	486	485	481	474	468
Mean*.....	480	481	482	482	484	485	486	487	488	489	493	493	488	483	480
Mean†.....	484	483	484	485	486	487	490	490	489	488	490	490	485	481	479

* Ten least disturbed days.

† Five international quiet days. Sept. 15 used instead of Sept. 14.

HOURLY VALUES OF HORIZONTAL INTENSITY.

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SEPTEMBER, 1913.

28000_r PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>h</i>	<i>m</i>	<i>γ</i>	<i>h</i>	<i>m</i>	<i>γ</i>	<i>γ</i>	
494	494	496	498	495	493	498	498	498	503	8	43	524	13	42	485	39	1
494	492	488	488	488	491	486	485	484	491	0	02	498	7	42	478	20	2
491	488	489	489	487	491	493	493	493	496	10	13	523	0	05	484	39	3
493	498	496	495	494	495	493	493	493	496	12	50	509	21	45	492	17	4
490	493	497	500	504	504	492	497	500	499	10	28	507	16	08	490	17	5
480	483	481	484	488	488	488	491	487	492	5	35	506	13	50	468	38	6
490	487	482	478	490	487	483	472	467	488	7	48	501	23	40	464	37	7
478	484	487	481	481	480	477	478	484	484	3	12	504	0	18	465	39	8
476	472	475	473	476	474	480	483	477	484	9	36	505	17	18	471	34	9
473	476	478	472	475	479	485	484	483	484	10	00	496	19	23	465	31	10
475	474	477	480	484	485	482	482	481	484	12	22	495	16	15	473	22	11
479	484	487	486	487	489	489	489	489	489	12	49	499	15	00	475	24	12
473	474	480	482	484	...	...	...	...	...	11	30	501	16	08	473	28	13
484	484	485	485	487	486	487	487	485	...	11	55	501	16	15	481	20	14
485	486	489	487	488	492	493	489	502	492	24	00	502	16	15	484	18	15
489	488	487	486	486	486	488	488	490	494	10	45	512	19	00	486	26	16
488	486	489	493	493	493	494	494	496	497	12	26	519	16	35	485	34	17
492	488	488	488	487	481	483	487	488	497	5	52	514	22	22	480	34	18
491	488	484	486	489	490	490	492	491	489	6	34	494	18	34	481	13	19
496	494	492	493	492	494	492	490	489	497	11	18	513	24	00	489	24	20
489	489	490	491	491	492	493	491	494	495	11	00	507	16	08	488	19	21
477	480	485	476	463	451	454	457	462	486	7	37	515	21	45	449	66	22
474	479	481	482	481	480	480	478	487	482	6	30	492	0	00	462	30	23
493	494	493	494	496	491	489	486	485	489	20	42	497	10	00	477	20	24
481	485	487	488	490	493	493	492	489	488	6	40	499	14	10	477	22	25
485	488	489	490	490	490	491	492	492	494	9	44	510	15	20	484	26	26
487	496	499	500	497	497	496	498	494	491	19	05	501	14	17	475	26	27
484	486	491	492	492	493	492	492	491	491	7	45	500	2	30	482	18	28
487	490	492	495	496	495	494	495	494	493	11	13	501	16	00	487	14	29
480	485	487	488	482	481	481	483	482	490	11	27	506	15	12	476	30	30
485	487	488	488	488	488	487	487	488	491							28	
489	490	491	492	492	493	493	493	493	494							24	
490	493	494	494	489	490	491	491	490	493								

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28000_r PLUS TABULAR QUANTITIES.

486	486	490	489	489	489	489	490	491	492	12	00	515	0	45	481	34	1
484	486	487	488	486	488	491	493	492	489	6	44	496	9	56	482	14	2
492	492	495	495	495	493	493	493	492	494	8	20	504	1	18	488	16	3
494	494	502	505	495	478	461	445	445	488	17	34	511	23	23	440	71	4
461	472	477	478	474	475	475	472	462	468	22	23	486	0	15	440	46	5
456	463	467	465	463	458	468	458	467	466	2	14	486	15	11	451	35	6
448	456	459	462	467	469	478	466	476	466	7	55	478	15	08	433	45	7
438	448	463	472	470	471	473	471	470	466	4	13	479	16	12	435	44	8
457	457	468	474	460	471	473	472	470	473	9	40	490	16	00	457	33	9
446	457	464	466	469	478	474	473	469	470	9	18	489	15	20	441	48	10
458	468	472	471	472	473	473	473	471	471	9	27	483	14	54	450	33	11
465	469	471	467	472	475	476	473	472	474	9	58	486	16	26	462	24	12
464	472	472	471	475	475	473	475	473	473	8	30	478	14	23	461	17	13
477	480	480	478	481	481	480	475	480	479	12	17	488	0	42	469	19	14
465	468	471	473	473	470	474	472	475	479	12	23	496	16	25	464	32	15
477	480	475	472	468	472	476	476	477	482	11	48	500	20	12	466	34	16
475	477	478	478	478	477	479	480	481	479	11	20	488	15	00	475	13	17
429	425	421	415	421	433	437	444	451	467	11	41	504	18	40	414	90	18
462	460	465	465	467	469	469	470	478	470	9	32	488	1	08	446	42	19
463	465	468	467	463	464	468	469	468	472	8	45	495	15	34	460	35	20
478	480	479	480	478	478	475	478	478	478	11	28	487	0	35	467	20	21
479	474	480	480	480	477	477	477	477	481	11	20	497	17	00	474	23	22
476	480	481	481	480	478	479	480	492	480	11	35	487	14	19	470	17	23
474	477	481	482	481	481	481	477	479	482	10	12	493	16	00	474	19	24
474	468	468	461	469	476	475	474	474	478	9	00	491	19	15	459	32	25
468	475	478	479	479	479	480	481	480	476	10	47	482	14	40	461	21	26
476	483	484	484	484	484	484	482	481	481	8	06	489	14	44	469	20	27
476	478	481	482	483	481	477	476	475	482	11	00	493	15	37	473	20	28
477	476	476	478	478	478	477	477	476	481	10	23	491	23	30	475	16	29
474	469	462	448	447	449	446	453	458	472	12	00	491	20	17	443	48	30
462	463	463	462	461	461	457	456	458	469	11	12	488	22	28	455	33	31
468	471	473	473	473	474	474	473	473	477							32	
480	481	482	482	482	481	482	482	482	484							21	
480	483	485	486	484	483	484	484	485	485								

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28000_r PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1	461	467	471	471	471	473	480	487	485	487	488	478	481	481	471
2	463	474	473	478	470	468	479	484	475	467	456	454	448	435	436
3	460	459	461	465	465	464	470	468	468	468	474	470	464	456	454
4*†	462	463	465	466	467	467	466	463	463	469	469	465	464	465	464
5*	468	471	473	472	474	471	473	475	477	476	477	473	472	470	463
6	468	469	469	468	468	473	482	484	485	483	480	476	466	464	454
7	457	459	458	462	462	467	475	483	488	492	489	464	467	463	460
8	458	467	463	464	464	467	471	474	474	473	465	461	464	457	454
9	458	464	463	463	464	466	472	477	476	475	476	474	469	461	463
10	---	---	---	---	---	---	---	476	473	475	470	---	462	461	461
11	471	472	474	476	478	481	481	476	470	467	470	473	474	474	473
12	469	471	469	473	476	479	479	473	475	474	478	478	471	468	469
13	470	471	473	474	475	476	478	478	473	471	473	473	467	467	468
14*†	472	473	473	475	475	476	481	483	481	476	469	466	465	463	464
15*†	472	473	475	477	477	478	484	486	486	483	481	483	479	476	475
16*†	474	474	477	478	481	480	483	487	489	491	492	488	480	473	474
17	479	479	480	482	483	483	485	485	492	496	501	499	488	480	477
18	477	476	478	483	484	485	487	487	489	487	479	474	470	472	471
19	474	477	476	477	478	479	480	480	477	479	475	470	462	465	471
20	475	476	477	477	478	481	481	481	481	488	491	488	484	476	475
21*	471	472	474	475	476	478	481	482	481	479	471	466	466	467	469
22*	476	476	479	482	481	481	485	485	486	487	484	471	465	463	464
23*	477	477	479	479	482	482	485	486	487	489	487	479	476	474	477
24*	471	473	473	475	476	478	483	486	487	484	486	483	480	474	473
25*†	470	471	473	473	476	478	483	483	485	489	486	482	475	480	484
26	469	470	472	475	478	481	479	476	473	466	467	468	466	463	465
27	475	476	478	477	480	483	488	486	483	476	474	469	467	463	461
28	465	461	472	469	470	472	474	474	469	474	474	477	464	449	450
29	461	465	464	466	469	468	468	470	473	467	460	460	459	457	455
30	464	465	466	468	470	471	476	481	481	481	481	478	470	464	460
Mean.....	469	470	472	473	474	475	479	480	480	479	478	474	470	466	465
Mean*.....	471	472	474	475	476	477	480	482	482	482	480	476	472	470	471
Mean†.....	470	471	473	474	475	476	479	480	481	482	479	477	473	471	472

DECEMBER, 1913.

28000_r PLUS TABULAR QUANTITIES.

1	464	465	467	468	467	469	474	477	476	478	476	470	465	465	461
2	460	461	462	462	468	476	480	481	477	469	460	459	451	448	452
3	464	466	467	468	466	468	468	465	463	459	460	458	454	455	456
4	463	463	463	465	468	470	482	481	479	473	475	455	448	444	422
5	445	444	461	460	460	459	465	462	459	459	461	459	453	448	446
6	448	446	451	454	454	456	460	465	462	458	449	450	453	454	455
7	464	465	467	472	477	487	490	494	494	490	487	480	471	459	446
8	458	456	454	457	460	462	468	477	476	472	469	465	463	462	465
9	463	464	464	466	468	471	478	481	482	478	473	467	459	456	449
10*†	461	462	462	465	466	469	477	480	475	474	474	472	463	462	461
11*†	460	462	464	463	465	467	470	472	467	466	466	465	464	464	461
12*	464	465	466	468	469	472	480	483	482	480	477	474	463	461	464
13*†	463	464	464	465	465	465	469	469	468	466	466	460	456	455	455
14	464	465	466	466	467	467	473	475	468	467	462	464	463	465	461
15*	457	457	460	464	467	467	473	477	477	476	477	474	468	467	461
16	462	460	462	467	471	470	474	473	471	470	471	467	460	458	459
17*†	461	462	463	464	465	464	465	466	463	461	461	459	456	457	459
18*	464	466	466	468	469	470	471	473	473	468	469	467	468	466	466
19	464	462	466	469	469	466	473	476	475	470	471	461	459	457	455
20	452	455	454	456	457	458	463	460	455	452	448	448	450	455	457
21*	461	461	463	465	465	466	469	470	467	464	459	449	450	453	457
22*	459	459	459	462	464	468	474	475	477	481	479	467	452	443	446
23*†	457	457	457	459	461	463	468	472	476	477	477	475	464	456	455
24	462	463	464	463	466	468	472	476	480	482	480	478	468	461	458
25	460	441	447	450	452	455	467	468	473	475	479	479	473	466	461
26	444	449	452	447	445	450	459	469	479	482	484	480	470	461	457
27	450	453	454	456	459	459	463	473	476	476	474	470	459	452	448
28	453	453	452	452	452	454	460	465	465	465	465	461	453	453	454
29	454	457	457	457	458	460	469	475	476	477	472	466	461	457	459
30	456	458	459	460	459	458	463	468	464	460	456	450	444	443	445
31	456	458	459	459	459	459	467	477	481	483	481	476	470	465	461
Mean.....	458	459	460	462	463	465	470	473	473	471	470	465	460	457	455
Mean*.....	461	462	462	464	466	467	472	474	472	471	470	466	460	458	458
Mean†.....	460	461	462	463	464	466	470	472	470	469	469	466	461	459	45

* Ten least disturbed days.

† Five international quiet days.

HOURLY VALUES OF HORIZONTAL INTENSITY.

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NOVEMBER, 1913.

28000_r PLUS TABULAR QUANTITIES.

16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean	Maximum			Minimum			Range	Day
<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>r</i>	
470	470	472	471	467	462	461	466	465	473	11	00	488	0	00	458	30	1
438	431	431	440	439	439	439	442	466	455	8	20	486	17	20	428	58	2
453	457	459	461	461	461	460	462	461	463	11	23	474	16	00	453	21	3
467	469	470	471	469	469	469	469	468	467	19	00	471	0	00	461	10	4
464	467	469	471	469	467	469	469	471	471	11	00	477	15	27	463	14	5
461	460	458	456	453	444	447	447	453	465	8	20	486	20	52	443	43	6
458	458	459	458	453	464	461	458	459	466	10	18	495	20	14	451	44	7
453	457	455	454	457	457	457	450	457	462	8	54	476	15	40	452	24	8
464	464	466	464	460	459	460	(460)	(460)	466	8	30	477	0	00	457	20	9
467	471	474	474	474	474	473	471	469	---	---	---	---	---	---	---	---	10
469	472	476	476	477	467	460	462	467	472	6	45	481	22	20	458	23	11
468	469	468	471	471	471	473	474	483	473	23	54	484	0	00	467	17	12
467	466	469	469	467	467	468	469	470	471	0	00	483	17	00	466	17	13
469	471	472	473	474	473	471	470	470	472	8	00	483	14	00	463	20	14
473	473	474	474	473	473	472	472	475	477	8	00	486	0	00	470	16	15
475	477	478	478	477	478	477	477	477	480	10	40	493	14	00	473	20	16
477	478	479	478	477	476	475	472	477	482	10	59	501	23	20	472	29	17
475	480	481	478	477	476	475	477	476	479	9	00	489	13	13	469	20	18
473	475	476	475	472	472	471	472	475	474	8	00	480	12	54	462	18	19
475	477	477	474	471	470	469	469	472	478	11	00	491	22	00	469	22	20
472	472	474	478	476	476	477	474	476	474	7	38	482	12	50	465	17	21
470	473	473	473	473	474	474	475	477	476	10	00	487	14	15	463	24	22
479	479	476	476	473	473	473	472	473	479	10	18	490	21	23	471	19	23
475	475	476	477	476	475	473	471	471	477	8	32	488	23	00	471	17	24
481	476	476	475	473	469	469	467	468	477	10	18	491	23	00	467	24	25
468	469	472	470	470	472	472	474	475	471	6	26	483	14	10	462	21	26
457	453	452	452	449	451	451	460	465	468	6	55	489	20	09	449	40	27
454	458	457	461	462	462	461	462	463	465	11	33	479	15	10	447	32	28
458	461	465	463	462	460	462	462	465	463	8	38	475	14	52	455	20	29
457	460	459	461	460	460	456	461	466	467	8	47	482	22	12	455	27	30
466	467	468	468	467	466	466	466	469	471							24	
472	473	474	475	473	473	472	473	473	475							18	
473	473	474	474	470	470	469	469	469	474								

DECEMBER, 1913.

28000_r PLUS TABULAR QUANTITIES.

16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean	Maximum			Minimum			Range	Day
<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>r</i>	
464	467	464	463	462	463	463	461	460	467	10	00	478	23	45	460	18	1
454	457	460	462	463	463	463	465	463	463	7	30	483	13	40	447	36	2
457	458	459	459	460	460	459	459	462	461	6	30	469	13	12	454	15	3
438	456	455	460	458	453	450	446	449	459	7	07	484	15	00	422	62	4
449	450	450	444	440	440	443	446	450	452	7	15	465	20	42	438	27	5
457	458	460	459	458	458	458	461	464	456	8	00	465	1	48	446	19	6
452	460	460	461	465	462	461	458	455	470	8	20	496	15	00	446	50	7
467	465	463	462	462	461	463	462	462	464	8	10	477	2	40	453	24	8
458	464	462	463	464	463	461	460	461	466	8	42	483	14	45	447	36	9
459	459	461	462	461	460	459	456	458	465	8	00	480	23	00	456	24	10
459	463	465	465	465	465	465	465	465	465	7	45	472	0	00	458	14	11
459	459	463	464	465	464	464	464	464	468	8	00	483	16	35	455	28	12
454	458	461	462	462	462	463	465	465	463	7	50	469	15	50	454	15	13
462	461	461	462	462	462	459	457	459	464	7	48	476	23	00	457	19	14
459	463	463	462	462	461	461	463	462	466	11	23	478	1	30	456	22	15
462	465	465	465	464	462	462	462	462	465	7	00	474	13	40	458	16	16
464	466	466	464	464	462	462	463	464	463	8	00	466	13	05	456	10	17
469	470	469	469	469	468	465	463	462	468	8	30	474	23	22	461	13	18
456	457	458	458	457	455	455	454	453	462	7	45	477	24	00	453	24	19
461	464	466	466	464	463	462	463	461	458	18	58	466	11	07	447	19	20
461	463	462	460	460	460	458	459	460	461	8	20	471	12	18	448	23	21
452	458	458	459	460	459	458	457	462	462	10	00	481	14	09	443	38	22
456	460	460	462	462	459	460	462	466	463	10	30	478	15	00	455	23	23
464	467	468	467	467	467	469	464	457	468	9	20	482	23	52	454	28	24
453	438	445	451	449	445	443	442	444	456	11	08	479	6	53	437	42	25
453	450	448	448	448	449	450	451	453	457	11	19	485	1	22	442	43	26
449	446	450	450	450	451	452	452	452	457	10	25	476	17	05	445	31	27
457	459	460	458	458	456	457	458	456	457	9	48	466	13	10	451	15	28
459	454	454	452	452	453	454	454	457	460	8	30	478	19	12	451	27	29
449	454	455	452	451	451	451	453	455	455	7	55	463	13	42	442	26	30
460	461	460	460	459	459	458	459	459	464	10	00	483	0	00	455	28	31
457	457	460	460	459	459	458	458	459	462							26	
459	462	463	463	463	462	462	462	462	464							21	
458	461	463	463	463	462	461	460	461	463								

JANUARY, 1914.

28000_r PLUS TABULAR QUANTITIES.

Day	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h
1*	461	461	464	464	463	465	471	475	480	481	479	474	467	459	458
2	459	459	459	458	461	463	471	488	493	495	484	471	460	463	460
3	448	451	455	456	457	456	462	462	456	457	462	459	458	457	455
4	451	454	455	455	456	457	464	469	465	464	458	452	450	453	454
5	438	441	447	443	448	450	456	459	454	443	454	450	445	440	434
6	444	451	448	447	450	451	461	466	465	464	465	464	456	453	450
7	448	448	447	449	449	450	455	454	451	454	451	448	447	445	442
8	448	445	444	447	448	451	460	466	465	460	457	457	450	442	441
9*†	447	446	447	448	448	449	451	453	453	450	452	443	431	428	434
10*†	446	446	445	447	448	451	455	458	457	457	449	446	443	447	449
11*	451	451	450	450	451	451	455	458	457	455	455	451	450	454	463
12	457	456	457	461	462	459	462	475	475	477	476	465	464	465	456
13	464	466	464	465	467	466	464	466	461	471	469	468	466	468	463
14	446	451	452	453	452	452	454	454	454	447	448	454	460	466	468
15	445	447	451	455	459	460	460	458	454	453	454	456	459	463	463
16	431	442	442	443	444	444	443	442	442	444	442	431	437	440	445
17	438	441	445	449	448	444	448	446	442	436	429	433	438	444	444
18*	439	439	442	445	445	445	445	451	456	460	459	451	446	442	437
19*	438	438	441	441	442	442	447	452	452	457	457	453	453	447	440
20	(440)	(440)	(440)	(441)	(441)	(442)	(442)	442	444	(447)	(449)	451	452	447	444
21	441	443	443	445	446	446	451	458	459	467	474	467	464	464	456
22	442	444	442	449	447	451	450	459	461	457	446	443	433	432	438
23*	435	436	438	438	441	441	444	448	449	444	436	432	430	436	437
24*†	440	440	442	443	443	443	446	443	441	443	446	445	442	442	442
25*†	443	443	443	444	444	444	446	450	454	454	455	457	459	459	453
26†	448	449	446	445	449	447	450	451	449	452	456	452	449	451	447
27*	447	446	446	445	448	449	456	461	465	461	462	459	454	454	452
28	448	449	450	450	449	452	454	455	460	461	460	450	444	442	440
29	444	444	443	444	444	443	448	452	454	455	456	453	448	451	457
30	441	439	441	443	444	443	446	450	453	453	455	456	453	446	441
31	441	442	444	446	445	444	446	444	439	434	435	436	440	433	435
Mean.....	446	447	448	449	450	450	454	457	457	457	456	452	450	450	448
Mean*.....	445	445	446	446	447	448	452	455	456	456	455	451	448	447	446
Mean†.....	445	445	445	445	446	447	450	451	451	451	452	449	445	445	445

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28000_r PLUS TABULAR QUANTITIES.

1*†	437	437	439	439	441	443	445	449	449	442	440	443	443	446	446
2	436	436	441	444	444	445	452	450	451	449	451	448	444	436	435
3	443	440	441	442	442	445	453	460	462	463	463	450	443	442	441
4	440	437	436	436	438	438	445	452	452	450	446	448	446	438	430
5	440	437	437	439	442	441	445	453	456	455	448	445	442	434	425
6	431	433	436	436	437	438	442	443	444	442	442	440	434	426	421
7	432	433	435	433	435	435	438	443	444	444	447	444	440	435	433
8*	433	434	434	434	435	436	438	441	442	440	440	442	439	439	439
9*	438	440	439	441	443	443	451	459	459	462	461	454	449	444	449
10*†	440	441	442	443	444	442	444	445	444	441	443	447	448	449	451
11*†	441	441	439	441	444	447	453	458	460	457	455	452	450	444	441
12*	435	437	441	440	441	442	452	460	463	464	466	466	460	458	452
13	445	447	448	447	447	446	453	460	463	462	457	450	446	447	448
14	436	435	437	439	439	439	444	452	454	454	452	451	447	445	447
15	430	427	434	435	440	440	445	453	452	453	450	449	444	436	432
16	434	437	436	439	439	440	443	447	448	450	454	453	450	444	442
17	441	440	441	438	438	440	447	456	457	459	459	467	467	465	456
18	431	436	436	441	444	447	452	462	463	458	455	447	446	444	437
19	440	439	440	442	442	446	451	452	451	447	449	449	444	443	436
20	440	440	442	444	445	447	450	454	455	455	457	457	455	450	444
21*†	435	438	439	440	439	440	446	455	457	456	457	456	454	452	444
22	438	438	438	437	439	440	451	477	480	472	474	479	478	465	456
23	427	427	429	429	431	432	452	459	463	457	456	456	451	445	438
24	439	443	445	441	439	442	442	447	449	448	450	445	448	449	447
25*†	434	434	434	435	436	437	442	449	460	464	462	459	454	446	441
26*	429	431	432	435	436	436	441	446	453	456	456	456	457	451	441
27*	434	434	433	435	435	435	439	449	455	457	459	456	451	446	440
28	436	437	440	442	444	444	447	458	463	463	461	460	460	454	441
Mean.....	436	437	438	439	440	441	447	453	455	454	454	452	450	446	441
Mean*.....	436	437	437	438	439	440	445	451	454	454	454	453	450	448	444
Mean†.....	437	438	439	440	441	442	446	451	454	452	451	451	450	447	445

* Ten least disturbed days.

† Five international quiet days.

HOURLY VALUES OF HORIZONTAL INTENSITY.

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28000r PLUS TABULAR QUANTITIES.

16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean	Maximum			Minimum			Range	Day
r	r	r	r	r	r	r	r	r	r	h	m	r	h	m	r	r	
458	461	464	462	461	458	457	456	458	465	10	00	481	23	36	456	25	1
453	451	454	449	450	449	449	448	448	462	10	05	496	22	42	448	48	2
454	454	454	449	451	451	449	448	450	455	7	25	463	23	40	447	16	3
459	465	470	456	436	432	433	440	443	454	18	12	471	21	05	429	42	4
439	442	448	447	448	451	450	452	448	447	8	17	460	14	45	434	26	5
450	448	449	449	444	449	451	448	447	453	9	31	466	1	28	443	23	6
438	443	449	445	444	443	442	445	447	447	9	47	456	16	10	437	19	7
444	439	439	446	449	451	451	449	447	450	8	30	468	17	00	439	29	8
436	439	440	445	445	446	446	447	446	445	9	00	453	14	00	428	25	9
450	450	453	451	451	451	450	452	451	450	8	00	458	13	05	442	16	10
452	451	446	447	446	452	451	452	455	452	14	57	463	18	32	446	17	11
449	447	449	448	448	455	458	459	467	460	9	55	478	17	00	447	31	12
455	449	449	448	445	446	448	448	446	459	9	50	473	20	05	445	28	13
465	463	456	456	452	444	441	447	448	453	15	00	468	22	15	439	29	14
466	458	447	441	430	429	433	433	432	450	15	50	468	21	15	427	41	15
448	442	437	434	437	437	437	439	439	440	15	35	450	1	15	431	19	16
443	444	438	438	436	433	438	436	439	440	6	45	450	11	00	429	21	17
433	433	435	436	438	437	439	437	436	443	10	10	460	16	30	430	30	18
441	439	444	443	442	(441)	(441)	(440)	(440)	445	10	43	457	0	00	436	21	19
444	446	444	440	437	437	440	440	441	443	11	43	453	19	48	437	16	20
457	451	451	445	448	439	439	437	440	451	11	05	474	23	22	432	42	21
426	420	423	434	432	437	435	440	435	441	9	00	461	17	05	420	41	22
438	439	439	437	437	437	437	439	440	439	9	00	449	12	45	429	20	23
439	441	445	445	444	443	444	444	444	443	7	18	447	16	20	438	9	24
448	443	442	443	444	444	446	448	448	448	13	37	460	18	10	442	18	25
443	443	444	446	447	446	447	446	448	448	10	40	456	16	15	441	15	26
449	451	450	447	446	444	445	446	448	451	8	50	465	21	09	444	21	27
440	444	446	443	443	441	442	441	443	448	11	33	463	16	12	440	23	28
453	447	444	444	444	442	442	440	442	447	14	50	458	23	00	440	18	29
438	436	439	439	438	438	438	438	439	444	11	33	457	16	30	435	22	30
437	438	439	439	437	436	437	436	436	439	7	00	446	13	30	432	14	31
447	446	446	445	444	443	444	444	445	449							25	
444	445	446	446	445	445	446	446	447	448							20	
443	443	445	446	444	444	445	445	445	446								

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28000r PLUS TABULAR QUANTITIES.

446	444	441	439	438	437	436	438	436	441	8	00	449	21	40	434	15	1
446	446	446	443	435	435	437	438	440	443	7	15	452	14	25	433	19	2
436	427	424	431	434	430	434	431	427	442	10	00	463	17	35	422	41	3
433	431	437	439	440	435	432	440	436	440	8	13	452	0	00	427	25	4
427	432	438	439	438	438	438	438	436	440	9	15	457	15	32	423	34	5
425	430	432	429	431	431	428	431	429	434	7	38	445	15	00	421	24	6
431	431	436	429	428	428	433	433	436	436	10	45	448	21	00	428	20	7
434	432	434	435	436	438	438	437	438	437	8	45	442	17	00	432	10	8
449	451	452	447	444	443	441	440	441	448	10	15	462	0	00	438	24	9
449	446	444	440	440	439	442	442	443	444	15	00	451	0	45	439	12	10
439	437	435	435	434	432	431	433	433	443	9	10	460	21	45	431	29	11
452	447	444	442	445	442	442	443	445	449	10	50	466	0	00	433	33	12
447	440	436	433	433	432	433	436	436	446	9	12	464	21	13	431	33	13
444	441	443	441	437	437	432	427	425	442	9	23	455	23	30	422	33	14
425	422	428	427	429	429	429	432	432	436	10	13	454	17	00	422	32	15
438	436	439	438	437	438	436	441	441	442	11	30	455	0	00	432	23	16
451	445	442	431	425	426	434	432	435	446	12	00	467	20	05	425	42	17
431	433	433	436	435	438	439	441	440	443	8	57	464	0	25	429	35	18
432	433	433	433	433	438	439	438	439	441	8	00	452	16	18	432	20	19
438	430	432	434	436	434	434	434	435	443	11	45	458	17	00	430	28	20
439	435	438	438	438	438	438	438	437	444	10	35	458	16	45	435	23	21
435	416	410	407	404	420	424	423	425	443	9	00	480	19	40	398	82	22
432	431	434	434	437	438	439	441	444	441	8	45	463	0	00	425	38	23
441	434	431	433	432	432	432	433	435	441	11	00	450	17	50	430	20	24
435	434	435	436	436	433	436	433	431	442	9	50	464	0	40	431	33	25
434	431	431	433	434	432	435	432	434	440	12	19	457	1	18	429	28	26
435	433	434	434	437	438	437	437	435	441	10	32	459	17	05	432	27	27
422	402	389	400	410	414	417	417	414	435	9	43	464	18	08	388	76	28
437	434	434	434	433	434	434	435	435	444							31	
441	439	439	438	438	437	438	437	437	443							23	
442	439	439	438	438	437	437	437	438	443								

MARCH, 1914.

28000_r PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1	419	422	425	431	428	427	430	444	453	453	451	451	438	433	420
2	416	419	419	426	427	427	434	441	445	448	451	450	439	431	418
3	422	409	413	415	416	420	421	431	444	451	456	455	449	439	431
4	422	421	424	424	424	423	434	442	452	458	455	453	442	433	424
5†	(420)	(422)	(424)	(426)	(428)	(431)	(436)	442	449	449	449	449	447	441	434
6	413	423	426	433	443	438	427	439	440	442	443	435	433	436	432
7	422	420	425	423	424	426	432	440	443	445	446	445	439	433	424
8*	421	420	421	427	429	426	426	429	431	429	429	432	434	429	423
9	429	431	431	433	431	433	435	437	444	450	449	458	457	450	437
10*	425	427	427	430	432	434	438	440	443	450	456	461	465	457	442
11	424	421	424	429	429	430	439	445	448	444	448	452	455	448	438
12	419	419	421	423	433	429	434	440	440	443	448	442	440	424	427
13*	422	429	428	428	428	427	431	435	440	439	436	438	441	436	432
14	433	429	435	436	431	429	434	433	433	442	444	449	447	440	431
15	419	421	425	427	429	431	433	432	431	434	450	443	424	405	396
16	419	425	425	424	423	421	423	425	428	430	432	435	435	430	428
17	430	431	431	432	433	432	437	442	450	454	461	467	456	448	450
18	418	420	421	424	427	428	432	434	432	430	433	437	435	432	428
19	430	433	434	433	437	440	446	454	458	461	458	454	448	445	442
20*	428	426	433	433	435	434	437	442	448	453	457	462	456	446	435
21*	430	431	434	435	438	437	440	449	462	468	469	468	459	449	439
22*†	431	431	430	433	436	437	435	432	435	441	447	454	449	439	431
23*	437	439	440	441	440	438	438	438	439	441	442	442	439	434	432
24	434	434	433	434	432	433	437	443	451	456	460	462	456	449	438
25	415	414	416	418	421	419	419	427	441	449	456	457	453	443	424
26	418	421	424	424	424	424	431	439	448	455	454	452	441	432	425
27	420	426	424	425	424	426	426	432	444	452	457	459	457	442	433
28*†	424	424	424	427	426	424	426	427	435	444	449	447	443	439	435
29*†	427	429	431	430	429	429	430	433	438	439	439	441	442	442	439
30*†	433	434	435	437	437	437	437	440	441	441	445	446	445	445	440
31	430	429	430	430	434	431	437	445	450	448	448	447	446	441	435
Mean.....	424	425	427	429	430	430	433	438	443	446	449	450	446	438	431
Mean*.....	428	429	430	432	433	432	434	436	441	444	447	449	447	442	435
Mean†.....	427	428	429	431	431	432	433	435	440	443	446	447	445	441	436

APRIL, 1914.

28000_r PLUS TABULAR QUANTITIES.

1	420	420	423	428	425	423	429	426	433	431	431	431	415	414	412
2	420	421	423	424	425	425	427	432	442	453	461	455	447	441	437
3	422	420	423	428	433	433	427	419	420	423	424	421	418	422	421
4*	419	420	422	425	424	423	423	428	431	435	439	438	430	430	429
5	428	430	430	430	423	429	434	439	447	450	450	444	436	437	438
6	434	432	440	429	468	425	418	412	418	416	391	360	350	320	317
7	377	378	384	390	397	400	411	418	428	433	427	417	427	415	415
8	382	391	390	408	396	393	392	399	397	392	394	393	389	398	406
9	396	405	401	399	401	399	402	409	413	416	418	416	416	421	422
10	409	406	413	412	413	413	417	420	421	430	438	440	436	427	416
11	410	408	408	407	407	408	407	410	416	430	438	437	432	427	419
12†	401	400	397	400	405	404	404	413	418	424	427	426	424	424	422
13*	412	417	414	412	417	413	414	414	413	423	423	423	422	421	423
14*	413	419	421	422	422	422	424	424	422	421	426	420	418	422	428
15†	417	417	416	419	421	421	421	419	423	424	416	415	414	420	422
16	405	413	410	414	413	415	414	424	423	429	411	405	400	400	406
17	409	408	409	412	411	410	408	418	427	432	436	431	429	423	414
18	410	412	415	415	419	418	416	419	429	434	434	432	427	425	418
19	406	399	403	404	405	408	408	418	434	444	444	434	430	425	414
20*	407	407	408	408	408	407	404	407	414	417	421	419	416	416	407
21*	409	408	411	413	411	408	403	412	415	422	426	429	428	425	418
22*	405	404	404	402	404	404	403	405	409	419	419	419	420	420	417
23	413	414	415	416	416	416	420	425	428	430	425	422	427	425	419
24	406	405	407	412	412	409	407	411	426	443	445	441	432	425	424
25*	409	413	412	411	410	412	408	401	407	416	418	419	418	416	411
26*†	(414)	(412)	(411)	(410)	(409)	(408)	(407)	(411)	415	411	403	398	402	406	409
27	419	421	421	421	418	422	422	426	436	437	432	427	415	406	407
28	409	408	410	409	410	408	404	408	415	412	407	404	415	417	414
29*†	412	413	413	411	412	412	414	422	426	426	426	426	421	418	412
30*†	413	411	411	411	412	412	412	422	427	433	434	426	422	418	415
Mean.....	410	411	412	413	415	413	413	417	422	427	426	422	419	417	414
Mean*.....	411	412	413	412	413	412	411	415	418	422	424	422	420	419	417
Mean†.....	411	411	410	410	412	411	412	417	422	424	421	418	417	417	416

* Ten least disturbed days.

† Five international quiet days.

HOURLY VALUES OF HORIZONTAL INTENSITY.

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MARCH, 1914.

28000_r PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>r</i>	
418	423	424	424	420	409	411	413	413	428	9	37	455	20	53	407	48	1
405	402	405	404	407	401	408	416	416	423	11	02	452	21	17	400	52	2
428	425	425	424	425	425	423	418	419	428	11	55	457	2	00	409	48	3
417	417	418	426	424	422	426	420	419	430	10	00	458	17	27	411	47	4
430	428	429	429	430	427	426	423	425	433	9	24	450	0	00	419	31	5
429	425	425	415	419	423	415	419	431	429	10	37	446	18	10	394	52	6
423	423	423	423	413	415	420	417	421	428	10	48	446	19	42	413	33	7
416	419	422	423	424	425	427	430	430	426	13	00	434	16	25	415	19	8
429	426	426	423	421	419	415	421	425	434	12	05	459	22	00	415	44	9
431	423	426	426	427	428	427	430	426	436	12	55	466	17	00	423	43	10
422	414	409	411	412	411	407	413	418	429	13	25	455	21	40	404	51	11
428	425	423	420	421	423	423	421	420	429	10	50	449	0	12	416	33	12
426	421	424	425	427	428	428	428	433	430	13	07	441	0	45	420	21	13
423	420	420	419	421	417	412	410	413	429	12	00	449	22	58	409	40	14
412	415	409	400	391	402	410	420	415	420	11	10	450	14	39	388	62	15
426	427	429	429	429	429	428	427	427	427	12	36	438	0	00	415	23	16
455	424	421	410	419	408	424	420	419	436	12	08	467	21	08	407	60	17
427	430	430	432	433	432	432	426	429	429	12	15	438	0	20	417	21	18
435	432	431	430	429	430	430	428	428	439	9	54	462	23	06	428	34	19
431	426	428	430	431	429	430	432	429	437	11	58	462	16	43	423	39	20
433	430	432	433	434	431	432	432	433	442	10	52	470	0	07	428	42	21
429	430	434	435	437	434	432	433	438	436	12	00	454	2	14	429	25	22
427	421	429	434	435	436	435	434	434	436	11	36	444	17	17	423	21	23
437	427	410	402	402	401	399	407	409	431	11	32	463	19	40	391	72	24
415	414	419	417	419	423	420	417	418	426	11	43	458	0	00	409	49	25
417	412	417	429	428	428	425	426	427	430	10	09	456	16	58	412	44	26
428	420	417	422	426	424	424	425	424	432	11	45	460	17	20	414	46	27
431	425	426	424	424	423	423	425	427	430	10	53	450	21	10	422	28	28
434	431	431	431	432	431	431	432	432	433	12	30	443	0	23	426	17	29
434	428	427	428	428	430	430	431	430	436	11	48	447	18	00	427	20	30
428	426	426	428	428	428	425	426	419	434	11	25	450	24	00	419	31	31
427	423	423	423	423	422	422	423	424	443							39	
429	426	428	429	430	430	430	431	431	434							28	
432	428	429	429	428	426	427	427	427	433								

APRIL, 1914.

28000_r PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>r</i>	
415	412	415	416	417	418	419	420	419	421	10	22	434	14	23	408	26	1
427	419	419	420	418	424	422	422	421	430	11	18	471	20	30	417	54	2
418	419	423	423	423	418	419	415	418	422	4	56	433	23	00	415	18	3
427	426	424	420	423	422	425	424	425	426	11	00	439	0	02	418	21	4
432	432	434	437	440	440	444	439	438	437	10	19	450	0	37	425	25	5
325	345	315	327	349	370	384	381	377	383	4	24	502	14	37	312	190	6
409	407	398	380	391	393	413	401	382	404	13	36	440	0	14	374	66	7
405	398	392	396	394	407	400	398	397	396	4	05	409	0	07	379	30	8
399	403	405	403	406	406	407	408	416	408	14	21	424	0	53	394	30	9
413	410	409	410	413	412	411	410	409	417	12	10	441	2	00	406	35	10
410	(407)	405	404	401	406	404	411	406	413	11	00	438	19	43	400	38	11
415	410	407	406	407	407	409	410	413	411	10	46	428	2	42	397	31	12
419	416	413	415	414	415	415	415	415	417	11	00	423	1	00	412	11	13
425	419	414	412	412	414	416	417	415	420	15	05	429	18	52	411	18	14
421	416	418	423	423	418	419	406	403	418	9	18	425	23	42	402	23	15
407	398	407	406	402	402	402	406	416	410	10	00	429	17	06	397	32	16
410	403	406	404	412	409	409	411	412	415	10	42	436	17	06	402	34	17
413	405	410	410	418	417	399	413	399	417	10	30	436	22	14	395	41	18
405	399	405	402	405	403	402	407	405	413	10	51	444	0	18	390	54	19
403	403	408	410	410	411	409	408	414	410	11	15	422	16	43	402	20	20
409	405	402	404	407	405	405	409	409	412	12	10	431	18	22	399	32	21
411	403	406	406	412	414	413	414	414	410	14	00	420	4	00	402	18	22
406	394	389	395	402	406	406	406	406	413	10	28	432	18	06	388	44	23
425	420	416	412	412	412	412	418	417	419	11	20	447	2	00	405	42	24
405	401	406	411	411	412	413	416	(416)	411	12	00	419	16	32	401	18	25
408	406	409	412	413	411	414	416	416	410	9	24	416	12	07	398	18	26
408	400	400	397	403	406	406	409	409	415	10	19	438	18	57	396	42	27
412	411	411	407	407	409	409	412	416	410	13	36	418	11	49	402	16	28
409	407	409	412	412	412	413	412	414	415	10	09	427	17	24	404	23	29
417	414	413	413	413	413	413	413	414	417	11	33	436	2	35	410	26	30
410	407	406	406	409	410	411	412	411	414							36	
413	410	410	412	413	413	414	414	415	415							20	
414	411	411	413	409	411	411	414	413	414								

MAY, 1914.

28000_r PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1	413	413	413	411	411	416	422	428	432	434	431	427	426	422	417
2	400	406	411	416	414	412	404	407	412	413	413	417	415	417	421
3*	417	416	418	419	420	422	419	423	429	424	421	419	414	410	410
4*	415	416	418	420	421	423	424	424	431	433	431	425	419	413	411
5	423	424	425	420	422	425	425	430	440	441	437	431	426	422	419
6	420	420	420	419	421	422	419	420	423	419	418	414	401	398	402
7	400	402	405	404	404	406	410	411	415	422	423	424	417	414	408
8	408	406	403	401	401	400	396	397	401	409	414	410	405	402	401
9*†	406	406	407	406	406	407	402	398	398	400	405	409	411	413	412
10*†	412	412	413	413	413	413	408	401	401	410	414	417	420	421	415
11	414	416	417	420	421	420	423	427	424	427	431	438	445	439	418
12	414	416	414	415	416	417	422	420	419	422	424	427	430	428	420
13*	415	414	417	416	416	418	423	428	427	430	439	437	435	429	423
14*†	412	412	413	415	418	418	419	422	426	427	434	434	426	416	411
15	415	420	417	416	414	410	403	408	409	405	413	419	413	411	410
16	417	406	405	405	405	409	406	407	413	423	424	422	414	406	401
17	407	411	408	431	417	421	429	441	428	422	408	404	403	397	390
18	401	401	401	402	404	406	407	406	410	410	407	400	393	386	386
19†	394	395	397	396	398	402	410	418	427	429	423	422	417	411	403
20*†	404	406	406	408	409	411	410	417	426	428	425	422	421	413	411
21	407	409	409	412	412	412	409	410	417	422	430	429	426	419	414
22*	410	410	411	411	410	411	407	404	407	406	406	406	403	404	403
23*	409	408	407	410	409	412	418	429	434	435	436	433	427	418	414
24	412	408	413	412	411	412	417	423	425	423	419	420	418	417	416
25	413	413	415	412	412	412	412	416	423	430	433	434	428	425	417
26	411	413	415	415	414	407	403	394	408	416	423	416	422	422	404
27	402	405	409	409	411	408	407	403	406	410	412	408	405	402	398
28	408	405	406	410	411	413	411	412	414	413	416	417	414	411	406
29	408	410	410	410	411	409	406	403	408	412	408	405	407	411	408
30*	409	409	410	412	411	411	415	420	424	423	422	417	412	404	406
31	413	422	424	424	424	421	421	419	427	442	441	432	412	408	417
Mean.....	410	411	412	413	412	413	413	415	419	421	422	420	417	413	409
Mean*.....	411	411	412	413	413	415	414	417	420	422	423	422	419	414	412
Mean†.....	406	406	407	408	409	410	410	411	416	419	420	421	419	415	410

JUNE, 1914.

28000_r PLUS TABULAR QUANTITIES.

1	361	367	377	377	378	381	384	386	387	387	390	388	392	393	395
2	387	389	390	393	395	396	395	388	384	385	394	404	402	391	393
3	396	396	394	391	394	397	402	404	404	402	396	392	389	388	390
4	391	390	390	392	394	396	399	399	398	398	396	396	393	395	392
5	394	392	390	395	392	394	395	398	400	399	394	391	396	401	402
6	407	408	405	404	405	404	409	403	401	405	407	408	417	419	415
7	...	...	...	...	...	...	...	...	...	...	...	...	413	423	422
8	405	405	408	407	405	406	401	401	402	409	419	412	408	407	401
9*	402	399	402	401	397	397	402	407	404	404	407	404	401	397	393
10	407	406	406	407	408	411	415	412	406	404	411	410	405	408	402
11*	406	403	403	403	404	409	412	411	409	408	404	401	396	406	401
12*†	403	403	404	405	405	406	409	407	413	415	413	412	410	418	420
13*†	407	406	405	407	407	409	406	403	406	410	410	408	406	409	410
14	408	409	407	408	407	408	410	416	423	424	424	429	432	428	422
15*	414	411	410	411	410	410	410	409	408	413	419	419	418	416	410
16*†	405	405	404	403	404	406	411	413	418	422	420	416	412	407	404
17*†	405	407	409	408	408	410	406	404	405	410	419	421	418	409	402
18	410	411	412	412	411	414	414	415	417	416	416	411	406	405	401
19	410	400	405	407	410	414	421	428	424	421	422	420	417	417	423
20	411	408	401	394	398	401	408	422	438	414	435	434	429	418	401
21*	398	399	398	399	398	401	403	407	413	421	422	425	422	417	417
22*	393	394	395	394	394	398	398	394	392	404	418	419	415	409	399
23*†	402	400	400	400	401	402	400	402	402	404	404	404	410	405	400
24	404	403	402	401	401	403	399	396	401	407	413	425	426	422	416
25	415	412	405	408	407	409	412	408	394	378	382	376	380	382	383
26	410	415	407	407	407	401	400	399	396	405	409	411	405	405	395
27	380	399	398	389	385	389	389	394	403	415	417	409	407	401	400
28	393	390	393	392	398	400	400	403	407	412	418	418	411	404	401
29	393	396	397	396	395	395	394	388	391	394	396	396	394	401	394
30	406	405	400	400	400	401	401	392	395	405	415	418	419	414	408
Mean.....	401	401	401	400	401	402	404	404	405	407	410	410	408	407	403
Mean*.....	404	403	403	403	403	405	406	406	407	411	414	413	411	409	406
Mean†.....	404	404	404	405	405	407	406	406	409	412	413	412	411	410	407

*Ten least disturbed days.

†Five international quiet days.

HOURLY VALUES OF HORIZONTAL INTENSITY.

69

MAY, 1914.

28000_r PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>r</i>	
415	411	409	408	406	405	403	396	397	415	9	58	434	23	18	396	38	1
421	420	420	421	418	418	417	416	417	414	15	10	422	0	20	397	25	2
411	415	417	417	417	417	414	414	415	417	9	00	429	13	34	410	19	3
414	421	429	427	427	427	425	425	423	423	9	36	434	15	00	411	23	4
419	425	423	423	420	418	414	414	420	424	9	33	442	22	33	413	29	5
408	410	403	403	410	408	402	397	402	412	5	44	424	23	02	396	28	6
402	397	400	402	402	406	407	405	407	408	11	42	425	17	41	396	29	7
402	399	398	401	406	405	405	406	408	404	11	07	414	7	00	396	18	8
414	409	409	411	412	411	412	412	412	408	16	00	414	8	12	397	17	9
409	406	408	411	414	418	418	416	414	412	14	14	422	8	12	399	23	10
411	411	413	414	414	417	415	417	417	421	13	07	448	15	21	407	41	11
419	411	410	411	407	408	410	412	415	417	13	06	431	20	15	406	25	12
(419)	(414)	413	414	413	414	413	411	413	420	11	18	439	23	24	409	30	13
409	(409)	410	411	412	414	415	415	415	417	11	30	435	16	00	409	26	14
409	405	406	403	388	391	396	401	399	408	12	08	421	20	20	380	41	15
402	401	403	407	405	397	396	409	414	408	11	28	426	21	12	394	32	16
398	401	402	401	400	393	391	403	400	409	8	45	442	21	27	390	52	17
389	392	396	400	401	401	401	398	394	400	9	28	413	14	36	385	28	18
396	395	398	401	402	405	408	407	407	407	9	55	429	0	54	393	36	19
408	407	407	406	407	407	407	407	407	412	10	00	428	0	57	404	24	20
406	400	404	408	411	411	411	412	412	413	11	34	431	16	51	400	31	21
404	403	407	408	410	409	409	409	410	407	5	51	412	15	36	403	9	22
410	407	411	412	410	411	411	411	411	416	11	00	436	17	00	407	29	23
415	411	411	413	411	409	413	413	414	415	8	38	426	1	54	408	18	24
400	407	404	397	399	402	405	407	409	413	11	39	436	18	55	397	39	25
399	394	396	409	411	412	412	413	406	410	13	32	424	17	21	386	38	26
398	397	400	402	404	401	401	401	401	404	10	39	413	15	36	397	16	27
406	407	407	405	404	404	405	407	408	409	11	45	418	0	00	401	17	28
408	406	407	408	408	407	407	408	408	408	10	03	413	8	12	403	10	29
411	414	416	415	415	415	414	413	412	414	9	49	424	14	00	404	20	30
422	418	410	386	354	343	354	357	362	406	11	15	445	21	40	335	110	31
408	407	408	408	407	407	407	408	408	412							30	
411	410	413	413	414	414	414	413	413	415							22	
407	405	406	408	407	407	408	407	407	410								

JUNE, 1914.

28000_r PLUS TABULAR QUANTITIES.

395	392	390	380	385	388	386	385	385	385	15	40	397	0	24	355	42	1
389	381	385	385	389	388	383	396	391	391	12	23	404	17	08	381	23	2
387	386	390	395	395	394	396	389	391	394	9	15	405	16	30	384	21	3
394	389	(390)	(391)	(392)	(392)	(392)	391	392	393	6	55	399	1	09	389	10	4
396	395	393	399	400	397	398	404	405	397	23	46	407	11	32	390	17	5
411	406	400	401	403	407	405	406	(406)	407	14	00	419	18	02	400	19	6
423	416	415	412	413	413	411	410	410	407	15	18	426	..	..	..	..	7
398	405	400	400	401	401	400	400	404	404	11	03	419	15	37	397	22	8
392	392	399	402	402	402	402	405	408	401	23	33	411	16	10	389	22	9
407	404	408	405	402	403	400	395	409	406	7	00	415	23	12	394	21	10
390	397	398	399	401	401	403	401	403	403	8	18	412	16	07	390	22	11
419	403	400	403	405	407	408	409	408	409	15	00	420	18	00	400	20	12
408	402	404	407	408	407	408	408	407	407	11	39	413	17	15	399	14	13
418	411	410	411	411	412	408	424	404	415	13	00	432	23	59	404	28	14
405	401	402	404	405	405	406	406	404	409	13	19	421	16	59	400	21	15
403	404	408	407	406	406	406	406	407	408	10	00	422	16	00	403	19	16
404	407	412	416	413	413	413	410	410	410	11	57	423	15	00	402	21	17
397	401	404	405	405	405	410	404	407	409	9	21	418	16	09	395	23	18
416	409	398	401	406	409	410	408	408	413	15	45	432	17	56	397	35	19
397	396	396	397	400	402	401	400	399	408	10	03	441	4	09	394	47	20
412	408	402	394	397	395	391	393	393	405	11	49	425	22	14	391	34	21
394	395	396	397	399	400	400	400	401	400	11	43	420	8	58	392	28	22
398	393	394	396	398	398	400	401	402	401	13	03	410	17	33	393	17	23
411	412	409	408	409	409	417	418	418	410	13	00	426	8	00	396	30	24
381	380	383	384	388	391	397	404	405	394	0	24	420	11	42	374	46	25
396	404	376	368	359	351	359	368	373	393	0	55	423	20	36	350	73	26
391	388	386	388	403	384	385	388	385	395	10	57	418	0	06	372	46	27
398	392	388	391	391	388	388	394	399	399	11	45	419	0	07	382	37	28
392	381	386	388	387	395	396	398	391	393	13	55	402	16	48	380	22	29
403	399	396	395	393	394	393	396	(396)	402	12	52	420	0	25	391	29	30
400	398	397	397	398	398	399	400	400	399							28	
402	400	402	402	403	403	404	404	404	405							22	
406	402	404	406	403	404	405	404	405	406								

JULY, 1914.

28000_r PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1*	̄ (395)	̄ (394)	̄ (394)	̄ (393)	̄ (393)	̄ (393)	̄ (393)	̄ 393	̄ 397	̄ 404	̄ 412	̄ 417	̄ 414	̄ 411	̄ 405
2*†	397	396	400	398	399	399	400	401	407	412	422	427	426	419	413
3*	404	404	402	402	401	402	401	404	418	432	439	439	433	425	414
4	405	405	405	403	404	407	405	404	406	409	410	412	419	418	410
5	407	404	403	406	394	388	396	388	385	396	379	368	362	357	363
6	384	386	387	384	383	389	395	400	403	407	414	419	414	407	402
7	393	390	389	389	389	390	387	385	385	385	393	396	403	398	394
8*†	398	398	397	397	394	396	391	385	387	396	402	410	409	409	405
9	397	398	396	398	401	407	404	394	399	410	411	409	407	401	394
10	394	387	388	392	391	388	382	394	405	419	422	428	421	416	403
11*	396	395	390	392	392	393	393	388	390	400	406	408	406	402	395
12*	395	400	397	396	395	398	396	393	400	410	419	416	417	413	407
13*†	405	402	399	395	396	394	398	403	410	420	430	432	429	426	418
14*	398	398	399	403	403	403	399	397	401	407	407	409	406	400	394
15	393	394	399	399	399	403	403	404	407	407	400	396	391	386	387
16	397	402	401	403	403	410	418	424	422	427	429	426	421	420	418
17*†	404	406	403	403	407	405	408	412	424	430	435	429	417	411	409
18	402	402	404	403	402	403	409	419	424	424	422	412	409	405	395
19†	392	393	393	393	396	397	393	387	397	409	412	417	415	408	402
20*	393	392	392	392	392	392	396	397	399	403	401	399	399	398	391
21	395	393	394	393	394	396	397	393	393	398	402	405	404	409	404
22	395	398	398	401	395	400	403	397	394	400	400	403	404	403	397
23	397	397	398	398	394	392	391	401	408	419	426	427	422	428	413
24	393	393	396	394	395	394	400	407	416	424	426	426	420	415	403
25	397	413	394	392	386	389	389	396	399	408	407	409	408	399	391
26	391	383	385	390	386	380	387	387	391	393	393	390	388	387	383
27	389	390	394	392	391	388	389	391	402	401	402	397	390	386	383
28	395	387	385	379	380	386	393	394	396	396	408	418	418	410	399
29	389	395	395	390	392	393	394	383	376	370	357	344	331	320	331
30	369	372	374	375	382	387	386	406	393	407	378	373	374	372	377
31	373	383	377	372	372	374	371	372	382	395	383	365	367	368	373
Mean.....	395	395	394	394	394	395	396	397	400	407	408	407	405	401	396
Mean*.....	398	398	397	397	397	398	398	397	403	411	417	419	416	411	405
Mean†.....	399	399	398	397	398	398	398	398	405	413	420	423	419	415	409

AUGUST, 1914.

28000_r PLUS TABULAR QUANTITIES.

1	386	387	384	382	380	384	381	386	395	395	397	387	376	369	374
2	383	383	391	390	389	384	384	384	394	399	388	383	378	362	371
3	387	387	392	398	400	380	380	378	375	370	367	371	371	379	372
4	...	...	...	...	...	...	...	367	375	380	377	378	374	370	374
5	388	380	380	380	381	381	378	377	381	384	386	385	380	379	381
6	...	...	...	...	...	...	...	369	377	390	398	387	370	389	363
7	369	377	372	373	373	375	376	376	382	387	387	392	386	383	378
8	387	388	384	387	387	382	380	376	380	384	386	389	398	402	398
9*†	386	386	384	383	384	387	380	378	384	388	394	397	394	394	385
10*†	386	388	388	389	384	384	381	388	396	399	402	403	397	388	385
11	390	388	390	391	391	394	402	405	408	415	412	414	410	386	374
12*	385	385	387	391	388	389	388	382	375	384	392	394	393	393	388
13*	396	396	395	398	390	390	396	395	397	396	396	391	391	392	395
14*†	391	389	389	390	392	392	390	388	390	395	399	407	404	395	389
15*	386	397	389	389	390	390	395	396	397	404	403	402	397	391	387
16*†	384	387	390	388	390	396	393	393	401	410	417	414	406	392	388
17	379	382	381	381	381	383	380	385	397	408	415	417	410	403	391
18	391	388	388	386	387	387	393	392	400	402	405	404	403	391	384
19	381	384	383	385	385	389	390	395	392	390	387	383	372	376	376
20	372	374	377	376	380	375	378	380	378	374	376	380	377	377	370
21*	385	384	381	379	378	378	377	380	388	398	403	406	400	393	386
22†	383	380	381	379	379	378	376	380	394	399	404	405	401	388	377
23	403	390	387	389	381	385	381	379	396	396	397	385	394	378	369
24	378	381	381	384	385	381	382	382	383	388	391	396	398	393	382
25	375	373	375	378	381	383	383	378	383	385	388	388	390	396	394
26*	380	380	382	383	381	381	374	376	382	390	398	396	396	388	378
27*	384	385	384	384	383	383	383	387	388	388	388	384	383	387	384
28	382	380	388	380	392	398	392	388	389	399	410	414	403	390	383
29	383	373	371	375	373	381	373	382	389	393	394	388	373	369	371
30	383	383	383	384	387	387	386	389	395	394	389	385	376	374	373
31	376	384	383	382	387	387	384	376	381	388	388	380	375	374	367
Mean.....	384	384	384	385	385	385	384	384	389	393	395	394	391	386	381
Mean*.....	386	388	387	387	386	387	386	386	390	395	399	399	396	391	386
Mean†.....	386	386	386	386	386	387	384	385	393	398	403	405	400	391	385

*Ten least disturbed days.

†Five international quiet days.

HOURLY VALUES OF HORIZONTAL INTENSITY.

71

JULY 1914.

28000_r PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>r</i>	
399	396	400	401	400	400	398	397	397	400	12	10	418	8	00	393	25	1
405	400	400	401	402	402	403	403	404	406	11	48	428	2	00	396	32	2
404	401	401	409	411	412	409	405	406	412	11	23	441	17	21	400	41	3
407	405	405	408	410	409	438	444	428	412	22	38	456	4	00	403	53	4
356	358	366	372	376	378	381	385	384	381	0	00	428	16	23	354	74	5
395	390	387	386	388	394	385	387	392	395	12	29	419	4	22	380	39	6
384	387	384	390	396	397	397	397	398	392	13	12	403	16	12	381	22	7
401	398	396	398	397	398	401	399	397	398	12	00	410	8	27	382	28	8
390	382	377	376	370	391	379	386	388	394	10	27	412	19	57	370	42	9
397	392	386	389	388	385	389	388	389	397	12	12	429	6	33	381	48	10
394	392	390	391	391	(391)	(391)	390	393	395	12	06	409	8	27	387	22	11
402	395	394	398	398	397	399	403	406	402	11	08	421	17	44	392	29	12
407	394	392	394	394	393	393	394	394	405	11	57	432	5	46	388	44	13
392	397	399	402	401	399	394	393	394	400	11	51	409	22	29	389	20	14
389	390	404	407	403	394	393	396	396	398	9	25	408	15	56	386	22	15
414	408	407	407	405	402	401	401	404	411	11	00	429	0	29	393	36	16
402	401	399	400	400	400	398	402	401	409	11	03	435	22	00	398	37	17
387	(385)	384	386	387	389	392	394	394	401	9	20	426	18	14	384	42	18
397	391	392	395	394	394	395	389	389	398	12	40	417	23	27	387	30	19
389	385	388	400	403	403	398	392	395	395	10	22	404	16	18	383	21	20
403	395	389	390	391	389	387	392	397	396	13	49	409	20	30	385	24	21
395	376	374	384	389	386	390	400	400	395	13	00	404	17	30	371	33	22
404	393	383	388	390	393	394	395	398	402	13	48	431	17	36	383	48	23
394	373	377	389	379	386	388	396	394	399	11	55	428	17	02	371	57	24
383	378	372	380	382	388	398	382	398	393	1	59	422	18	03	372	50	25
380	377	379	384	384	386	393	394	394	387	0	14	409	15	50	377	32	26
385	390	389	390	392	391	390	398	390	392	9	27	406	15	36	379	27	27
387	383	385	385	385	385	383	385	392	392	12	08	421	4	00	379	42	28
323	345	330	343	342	339	348	357	372	361	3	15	403	13	46	314	89	29
365	361	358	357	375	361	362	383	369	376	7	55	408	19	27	351	57	30
373	374	374	376	378	377	385	385	382	376	10	04	396	11	37	361	35	31
390	387	386	390	390	391	392	394	395	396							39	
400	396	396	399	400	400	398	398	399	402							30	
402	397	396	398	397	397	397	398	400	403								

AUGUST, 1914.

28000_r PLUS TABULAR QUANTITIES.

373	370	372	379	379	379	378	379	384	382	11	00	397	17	40	361	36	1
369	367	383	383	386	386	384	389	386	383	9	59	400	14	03	359	41	2
348	343	363	370	370	373	372	389	(380)	376	4	36	411	16	51	339	72	3
374	369	374	376	378	382	382	379	388	...	...	...	391	17	10	367	24	4
377	375	377	381	381	381	382	378	379	380	0	24	391	17	20	374	17	5
343	334	349	356	351	358	355	359	368	...	...	...	398	17	07	332	66	6
378	378	385	393	390	389	388	390	390	382	12	00	392	0	49	368	24	7
390	383	(384)	(385)	(385)	(384)	(383)	383	387	384	14	18	403	7	30	374	29	8
380	378	382	386	386	386	385	385	387	386	12	21	399	8	06	377	22	9
376	374	378	384	386	387	385	385	387	388	12	00	403	17	07	372	31	10
365	365	365	372	368	378	381	385	387	389	12	19	417	18	35	360	57	11
387	385	393	394	395	393	395	394	392	389	13	36	395	9	15	374	21	12
390	387	387	384	384	387	387	390	391	392	3	40	401	19	48	383	18	13
383	383	386	393	392	387	394	393	390	392	12	40	408	17	00	383	25	14
383	381	381	382	382	381	384	384	384	390	11	37	404	21	09	381	23	15
384	381	382	382	384	388	385	384	380	392	11	00	417	24	00	380	37	16
398	396	396	397	394	387	384	386	390	393	11	59	417	1	00	379	38	17
376	376	374	378	382	376	373	387	382	388	11	27	407	22	04	372	35	18
375	363	359	359	361	358	358	373	376	377	8	00	395	17	16	349	46	19
362	368	372	373	373	373	376	377	382	375	8	21	383	15	34	358	25	20
377	372	374	375	377	374	373	375	380	383	12	00	406	22	18	371	35	21
371	373	377	377	377	376	375	377	374	383	12	10	405	16	15	370	35	22
359	360	370	372	377	377	380	380	379	382	1	08	405	16	20	356	49	23
368	360	367	369	367	369	373	378	375	380	12	56	398	17	00	360	38	24
390	382	377	375	372	371	375	380	378	381	14	21	399	20	22	370	29	25
374	377	375	379	377	373	377	381	383	382	12	21	401	20	52	372	29	26
382	378	379	384	381	379	377	381	379	383	9	30	390	22	27	376	14	27
378	368	378	385	369	346	380	375	367	386	11	48	415	20	54	345	70	28
364	355	359	372	376	378	376	378	375	376	11	14	396	17	09	354	42	29
362	366	366	377	383	381	379	378	377	381	9	23	396	16	06	362	34	30
362	362	368	372	372	372	374	374	376	377	10	58	389	17	04	362	27	31
375	373	376	380	380	378	380	382	382	390							34	
382	380	382	384	384	384	384	385	385	388							26	
379	378	381	384	383	382	382	383	386	388								

SEPTEMBER, 1914.

28000_r PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1	378	379	381	384	380	373	373	386	399	407	412	410	401	384	375
2*	379	379	380	380	381	380	371	368	373	384	391	392	388	383	380
3*	386	389	388	390	389	387	383	383	393	386	383	382	379	376	378
4	384	387	389	391	393	398	400	389	375	375	380	380	380	379	374
5	382	381	382	384	383	386	388	381	375	398	402	401	401	390	375
6	383	383	391	386	383	384	378	381	386	389	390	384	383	381	374
7*†	383	383	382	381	383	384	388	392	393	393	399	409	405	398	392
8	392	391	389	391	390	386	383	387	396	405	410	405	399	390	387
9	388	380	385	387	388	391	383	391	398	400	397	394	384	381	377
10	381	384	386	387	390	392	392	387	382	392	392	389	385	380	371
11	389	385	381	378	380	379	383	396	403	406	405	397	391	380	376
12	387	388	387	390	389	389	386	382	385	382	381	370	367	367	365
13*	375	377	379	382	385	388	392	398	403	404	405	402	397	392	389
14*†	385	386	386	387	391	391	387	385	389	393	396	392	387	380	372
15*	385	393	389	388	391	392	389	393	388	389	390	387	381	371	364
16	384	387	390	394	401	402	398	400	396	393	385	376	364	359	363
17	380	382	381	382	380	379	379	375	377	384	391	385	377	369	366
18	367	389	374	372	378	380	376	374	374	385	385	378	369	367	367
19	375	375	381	382	382	383	379	379	389	397	402	401	394	381	374
20*	383	384	383	383	388	385	379	382	387	390	389	388	382	381	382
21*†	384	384	387	392	391	391	389	383	383	390	397	396	392	386	384
22*	390	389	390	389	389	390	389	388	390	399	409	407	404	396	393
23	386	383	379	378	382	380	378	381	382	386	389	382	376	357	345
24	375	375	371	376	379	379	377	375	377	386	390	386	378	378	373
25	379	382	381	382	389	386	385	379	375	373	378	377	375	377	376
26*†	388	386	388	389	391	396	395	390	388	392	396	396	392	383	378
27	391	393	396	390	391	393	396	398	401	398	385	356	333	316	291
28	325	337	342	346	349	355	366	382	386	393	389	379	379	375	379
29	362	359	361	370	373	372	364	370	361	360	360	352	346	346	345
30	370	372	375	374	380	381	384	394	404	405	394	381	373	360	348
Mean.....	380	381	382	383	385	385	384	385	387	391	393	388	382	375	370
Mean*.....	384	385	385	386	388	388	386	386	389	392	396	395	391	385	381
Mean†.....	384	384	385	386	387	388	386	384	385	390	396	397	393	386	381

OCTOBER, 1914.

28000_r PLUS TABULAR QUANTITIES.

1	355	361	364	368	376	382	378	368	369	361	369	376	374	363	355
2	361	364	368	371	376	376	374	370	369	375	385	384	383	366	367
3	369	373	375	378	380	379	373	369	365	363	371	373	362	348	349
4	372	371	371	378	378	380	373	371	370	372	373	371	369	368	372
5*	375	377	377	380	380	379	381	387	386	382	385	390	389	378	370
6	373	375	374	377	377	379	382	383	383	384	380	388	393	391	386
7	365	362	364	367	370	367	364	364	365	368	369	382	383	374	367
8	358	363	364	368	369	372	375	374	370	370	373	376	377	373	370
9	364	367	369	372	375	376	383	382	383	377	376	376	372	369	370
10	372	372	372	374	377	379	383	384	381	377	379	373	362	350	351
11*	364	367	369	373	371	370	375	380	382	383	385	382	378	373	363
12*†	364	365	367	372	368	366	367	364	369	369	368	366	362	361	361
13*	369	363	363	369	370	377	377	381	381	377	376	374	369	363	356
14*†	369	372	371	372	371	368	369	368	371	368	367	371	374	369	367
15	367	366	366	368	370	369	369	370	369	369	369	373	374	371	359
16	354	354	357	367	367	367	364	359	359	363	363	363	363	360	355
17	362	355	366	370	369	370	373	369	370	373	372	369	361	354	348
18	364	362	359	363	362	368	364	362	359	369	370	371	364	357	352
19	359	359	363	368	368	370	369	371	375	377	379	379	377	373	360
20	363	363	362	365	369	366	363	357	349	349	353	363	368	367	365
21	367	356	353	351	355	354	356	361	370	376	378	369	376	372	367
22	361	362	363	364	363	365	361	357	361	367	370	369	362	356	354
23*	360	363	364	362	361	365	368	367	370	370	371	375	374	371	364
24*†	363	364	365	364	365	364	366	369	371	371	368	365	364	363	358
25*†	363	365	367	369	369	370	372	374	375	375	375	376	371	376	368
26*†	371	371	373	375	376	375	375	375	376	377	378	379	379	377	373
27	372	372	375	377	374	372	373	378	379	383	383	386	384	383	375
28	371	335	340	334	341	342	344	353	344	342	345	353	334	317	302
29	325	346	334	334	335	332	334	326	337	336	334	328	313	309	314
30	336	343	342	344	348	349	351	354	354	354	354	350	345	343	338
31*	346	346	346	346	349	348	350	351	353	360	363	364	362	362	353
Mean.....	362	362	363	366	367	368	368	368	368	369	370	371	368	363	358
Mean*.....	364	365	366	368	368	368	370	372	373	373	374	374	372	369	363
Mean†.....	366	367	369	370	370	369	370	370	372	372	371	371	370	369	365

* Ten least disturbed days.

† Five international quiet days.

HOURLY VALUES OF HORIZONTAL INTENSITY.

73

SEPTEMBER, 1914.

28000 γ PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	h	m	γ	h	m	γ	γ	
371	369	374	377	377	377	379	383	383	384	11	38	412	17	22	369	43	1
376	378	381	382	386	388	386	388	388	382	11	55	392	8	00	368	24	2
378	377	379	379	382	387	386	385	385	384	9	22	394	15	37	373	21	3
372	375	377	381	378	373	378	378	380	382	6	48	402	15	45	372	30	4
368	370	375	375	373	377	389	392	388	384	11	00	402	16	16	365	37	5
370	374	375	370	376	381	380	381	381	381	10	40	391	18	54	368	23	6
384	379	381	383	382	385	385	387	387	388	12	10	410	17	00	379	31	7
384	385	386	379	382	381	382	378	382	389	11	28	410	23	45	375	35	8
380	372	377	382	381	378	375	378	381	384	10	06	402	16	48	371	31	9
370	370	377	378	379	380	388	383	383	383	10	13	394	16	12	367	27	10
377	378	381	386	387	386	384	392	388	387	10	18	408	16	13	375	33	11
363	366	368	374	379	377	372	374	374	378	4	39	390	16	11	361	29	12
386	387	382	385	386	382	385	385	385	389	11	00	405	0	01	374	31	13
372	376	379	378	382	385	385	384	382	385	11	09	396	15	25	369	27	14
372	381	383	385	385	384	383	380	382	384	8	09	393	15	00	364	29	15
365	363	365	370	375	377	375	375	378	381	6	00	402	14	12	356	46	16
369	379	386	388	389	383	377	373	375	379	11	00	391	14	32	366	25	17
369	373	376	376	378	378	380	381	376	376	1	49	390	1	12	366	24	18
377	381	381	384	387	383	382	386	384	384	11	47	403	15	10	373	30	19
385	384	386	385	386	386	384	384	384	385	10	24	391	7	18	379	12	20
384	384	386	387	388	388	389	389	390	388	11	31	398	8	21	382	16	21
394	397	401	394	392	375	382	384	373	392	11	10	409	23	39	369	40	22
354	365	372	372	361	369	364	365	368	373	0	28	392	14	42	341	51	23
372	378	381	382	381	381	381	376	374	378	10	33	390	0	11	367	23	24
377	378	380	381	380	381	383	385	386	380	5	38	389	0	27	373	16	25
379	383	387	388	385	387	386	385	385	388	11	30	397	15	00	378	19	26
282	255	251	248	255	274	304	310	319	339	9	22	401	18	38	247	154	27
381	389	392	379	371	370	371	366	358	370	9	54	396	0	00	319	77	28
343	348	357	361	366	361	369	369	372	360	0	30	375	16	50	338	37	29
345	350	346	364	367	364	351	348	354	370	9	50	406	16	11	344	62	30
370	372	374	375	376	376	377	378	378	380							36	
381	383	384	385	385	385	385	385	384	386							25	
379	380	383	384	381	381	382	384	384	385								

OCTOBER, 1914.

28000 γ PLUS TABULAR QUANTITIES.

360	367	373	372	358	369	362	361	358	367	5	45	383	0	24	349	34	1
368	368	375	373	376	373	366	381	370	372	12	22	386	0	00	358	28	2
363	357	361	368	365	366	368	367	369	367	5	31	381	14	36	345	36	3
372	368	370	375	374	373	373	379	376	373	6	09	381	0	38	368	13	4
369	366	363	362	367	368	368	368	374	376	12	30	391	18	57	361	30	5
383	375	360	367	373	362	377	366	366	377	13	00	393	18	14	359	34	6
367	369	369	368	362	360	359	358	361	367	12	25	384	22	44	358	26	7
367	371	367	366	367	370	376	367	365	370	12	39	378	0	39	357	21	8
374	370	357	363	367	367	367	368	370	371	9	00	383	17	46	355	28	9
356	359	362	362	363	363	359	357	365	368	8	30	384	14	16	348	36	10
364	360	360	356	356	359	363	364	364	369	11	00	385	19	23	353	32	11
362	368	370	370	370	370	368	368	368	367	4	00	372	16	12	361	11	12
357	359	366	369	371	372	372	371	371	370	8	30	384	15	33	356	28	13
367	367	370	368	369	367	367	365	365	369	12	53	374	22	31	364	10	14
350	346	352	356	351	352	347	349	353	362	12	33	375	16	39	344	31	15
350	352	356	360	359	360	362	362	362	360	6	00	367	16	00	350	17	16
351	(353)	(356)	(357)	(358)	(359)	359	359	359	362	9	25	374	15	10	347	27	17
346	355	363	364	366	370	360	376	365	363	23	03	376	15	57	346	30	18
351	352	359	359	356	354	362	364	365	365	11	45	380	16	00	351	29	19
365	365	367	366	361	356	360	358	369	362	4	34	370	9	39	347	23	20
366	363	364	364	365	364	361	361	362	364	10	39	379	4	10	349	30	21
355	359	356	363	363	362	369	363	357	362	11	18	371	15	36	352	19	22
361	361	363	363	363	361	358	357	356	364	12	30	375	23	37	355	20	23
360	363	366	366	366	366	366	363	363	365	9	36	371	0	00	356	15	24
364	365	368	367	368	368	368	370	371	370	12	36	377	16	18	362	15	25
369	371	375	375	377	375	373	372	372	375	12	00	379	16	00	369	10	26
368	374	381	381	376	368	361	350	342	374	12	14	389	23	44	333	56	27
295	312	304	325	331	335	338	331	353	334	0	57	371	15	45	287	84	28
325	333	336	337	340	342	342	348	340	332	0	18	370	14	33	309	61	29
331	332	340	340	344	347	342	344	347	345	10	21	355	16	00	331	24	30
350	359	354	354	353	353	351	351	351	353	12	16	364	1	00	346	18	31
358	359	361	362	362	362	362	362	362	364							28	
362	364	366	365	366	366	365	365	366	368							19	
364	367	370	369	365	365	365	365	365	368								

NOVEMBER, 1914.

28000_r PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1	352	350	348	350	349	356	362	360	345	353	348	336	336	344	335
2	343	341	344	346	347	349	351	350	353	356	358	356	353	351	342
3	350	349	354	342	342	343	350	351	350	352	351	344	347	346	336
4	349	346	343	339	342	351	348	350	351	348	340	337	337	319	331
5	338	339	341	341	342	344	346	350	345	352	357	357	355	352	346
6*	341	340	342	343	344	344	344	345	345	346	347	346	348	346	344
7	341	345	346	347	351	349	346	348	347	346	346	345	344	343	340
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9*†	(352)	(352)	(353)	(353)	(354)	354	357	356	356	354	354	353	351	347	345
10	360	359	361	362	362	361	363	365	365	368	369	373	375	378	374
11	365	369	367	362	363	363	368	365	340	344	334	318	331	310	291
12*	339	337	341	345	348	348	347	348	351	352	349	340	332	335	338
13	339	340	344	347	349	354	359	361	360	355	354	352	342	332	337
14	350	355	355	353	354	359	364	366	365	365	364	362	356	351	348
15	337	338	340	345	345	349	356	359	359	361	364	355	347	331	336
16	351	354	356	359	364	365	370	369	371	373	377	376	371	361	346
17	351	350	350	353	354	355	358	360	362	361	363	360	354	346	347
18	352	351	353	354	353	356	359	364	363	367	367	365	357	353	350
19	346	351	352	356	354	355	360	363	362	360	360	357	350	350	350
20*†	354	356	355	355	355	356	358	358	358	358	361	361	361	359	358
21*†	359	359	359	359	361	360	362	365	367	367	365	365	367	365	364
22*†	360	361	362	362	362	361	363	364	365	365	365	363	361	361	361
23*†	361	360	361	361	361	362	356	367	366	363	363	361	358	355	355
24*	358	359	359	360	361	363	363	362	359	356	355	354	352	354	353
25*	360	360	361	363	364	365	368	370	370	369	367	365	363	359	360
26	359	360	361	362	364	366	369	370	369	369	366	367	362	366	364
27	335	342	349	346	348	350	359	361	361	357	356	356	351	346	341
28	345	343	343	349	351	355	359	360	359	357	355	352	350	347	348
29	348	348	350	353	355	354	358	359	360	359	355	356	356	354	352
30*	351	351	351	352	352	352	354	354	354	350	352	355	354	352	351
Mean.....	350	350	352	352	354	355	358	359	358	358	357	358	352	349	346
Mean*.....	354	354	354	355	356	356	358	359	359	358	358	356	355	353	353
Mean†.....	357	358	358	358	359	359	361	362	362	361	362	361	360	357	357

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28000_r PLUS TABULAR QUANTITIES.

1*	353	354	353	354	353	352	354	354	353	351	349	349	349	349	351
2*†	354	355	354	355	354	354	357	356	355	355	354	352	352	354	356
3	354	356	357	359	359	359	361	362	361	362	364	364	363	361	358
4	355	355	355	356	357	357	356	355	355	355	355	352	353	353	354
5	350	352	353	353	355	355	356	357	355	354	353	353	354	353	350
6	349	350	353	354	354	353	355	356	354	353	352	352	355	352	354
7	357	355	356	356	354	356	359	361	361	357	359	365	362	359	354
8	348	348	351	351	354	354	357	356	354	354	353	351	351	353	354
9	352	352	353	351	353	354	356	356	356	355	353	349	346	350	348
10	344	346	349	350	351	552	354	355	352	350	349	349	347	344	343
11	352	352	351	352	353	354	356	356	356	355	353	350	350	351	351
12	353	354	355	355	354	357	356	353	349	348	345	345	344	343	342
13*†	348	349	350	350	350	351	353	355	355	353	352	350	349	348	346
14*	349	348	348	351	351	351	352	354	355	354	354	353	350	349	350
15*†	348	350	349	350	351	351	351	355	355	355	352	351	350	352	354
16	355	356	355	356	357	357	359	359	357	356	355	355	355	352	347
17	348	349	348	351	348	348	351	351	348	350	351	350	345	345	346
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	347	352	350	356	358	357	359	360	358	355	354	352	347	344	338
20*	348	349	350	350	351	354	358	360	354	344	339	338	(338)	(340)	(342)
21*†	347	347	345	345	346	344	348	353	350	345	340	342	342	345	344
22	349	354	358	361	360	364	366	364	356	350	343	337	337	336	329
23*	345	348	352	354	354	356	355	359	357	351	341	332	334	340	349
24	353	357	361	365	369	368	374	369	354	339	330	325	327	333	338
25*	343	345	347	346	346	349	351	349	345	339	333	326	326	331	334
26*†	346	348	348	348	349	353	354	353	342	332	326	329	332	334	337
27	349	349	348	345	347	352	354	356	347	344	352	341	338	347	351
28	351	353	355	357	347	339	343	349	340	330	313	319	311	294	309
29	326	330	328	330	332	333	339	341	336	339	347	343	336	337	336
30	355	337	337	340	341	343	348	347	342	343	338	333	332	333	336
31	356	339	340	340	343	342	349	349	342	349	331	330	332	333	331
Mean.....	347	349	350	351	352	352	355	356	352	349	346	344	344	344	344
Mean*.....	348	349	350	350	350	352	354	355	352	348	344	342	342	344	346
Mean†.....	349	350	349	350	350	351	353	354	351	348	345	345	345	347	347

* Ten least disturbed days.

† Five international quiet days.

HOURLY VALUES OF HORIZONTAL INTENSITY.

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NOVEMBER, 1914.

28000 γ PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>h</i>	<i>m</i>	<i>γ</i>	<i>h</i>	<i>m</i>	<i>γ</i>	<i>γ</i>	
328	330	336	337	334	335	335	336	339	343	7	30	363	16	00	328	35	1
331	334	342	345	348	349	349	347	350	347	11	00	358	16	20	329	29	2
325	334	332	340	340	343	348	348	347	344	2	41	357	16	09	323	34	3
320	328	331	328	328	334	335	343	342	338	9	00	351	14	02	318	33	4
346	340	342	343	342	344	343	343	340	345	11	23	357	1	30	337	20	5
343	343	341	340	340	338	335	336	339	342	12	45	348	22	00	335	13	6
339	341	339	332	335	337	339	339	339	343	5	35	352	19	20	331	21	7
...	...	...	(353)	(353)	(352)	(352)	(352)	(352)	...	...	...	...	...	...	...	...	8
345	349	355	356	356	355	354	356	359	353	24	00	359	15	54	343	16	9
375	374	371	366	359	365	369	368	366	367	13	57	379	20	14	358	21	10
308	318	326	327	329	329	332	332	339	339	7	39	370	15	30	287	83	11
334	332	336	336	341	336	339	339	337	341	9	33	353	17	08	331	22	12
339	343	350	352	353	353	350	353	349	349	8	00	361	13	55	332	29	13
349	338	318	330	337	336	339	340	337	350	8	26	368	18	00	318	50	14
338	345	346	347	355	354	351	344	341	348	11	00	364	14	29	328	36	15
347	350	353	342	347	342	345	347	348	358	11	00	377	20	33	338	39	16
347	348	347	347	341	340	346	351	351	352	11	00	363	20	16	340	23	17
348	345	351	355	355	355	352	353	350	355	10	41	368	17	00	345	23	18
350	351	352	353	351	350	351	354	354	354	8	00	363	1	20	346	17	19
357	358	357	359	358	358	358	359	359	358	11	09	361	0	00	354	7	20
363	363	362	361	361	361	360	359	359	362	9	30	368	0	42	358	10	21
362	361	362	362	360	359	359	358	358	362	9	00	365	24	00	358	7	22
358	361	363	363	363	362	361	360	358	361	8	00	367	15	00	355	12	23
355	357	359	359	359	359	358	358	358	358	7	00	363	12	09	350	13	24
360	363	364	365	364	363	362	360	361	364	8	00	370	0	00	358	12	25
357	357	341	329	332	327	328	324	326	354	8	00	370	21	30	323	47	26
340	344	345	345	343	343	345	351	347	348	9	00	361	0	00	326	35	27
349	349	353	353	351	350	350	348	347	351	8	00	360	2	38	341	19	28
349	352	353	352	351	352	350	351	350	353	9	00	360	0	00	347	13	29
349	348	351	351	351	351	351	350	350	352	12	07	355	16	39	347	8	30
345	347	348	347	348	348	348	348	348	351							25	
353	354	355	355	355	354	354	354	354	355							12	
357	358	360	360	357	356	356	356	356	359								

DECEMBER, 1914.

28000 γ PLUS TABULAR QUANTITIES.

351	351	353	354	354	354	354	354	355	352	24	00	355	12	00	349	6	1
356	355	357	357	357	356	354	354	355	355	7	00	357	13	00	352	5	2
356	352	254	358	357	356	356	355	353	358	12	00	364	17	00	352	12	3
354	356	356	354	349	346	344	344	347	353	6	00	357	22	21	342	15	4
352	353	353	352	353	352	351	318	347	353	8	00	357	0	00	347	10	5
356	356	357	357	357	355	354	352	356	354	19	00	357	0	37	347	10	6
351	348	350	351	350	346	343	345	349	354	12	00	365	22	00	343	22	7
351	349	350	351	350	348	348	348	350	351	7	00	357	22	00	348	9	8
346	340	336	334	338	340	341	340	343	348	7	38	358	19	12	333	25	9
344	349	353	354	354	352	351	351	352	350	8	00	355	15	15	342	13	10
352	354	356	356	355	353	352	353	353	353	9	00	356	12	44	350	6	11
344	346	348	348	348	348	348	348	348	349	6	00	357	15	00	342	15	12
347	348	351	351	351	351	349	350	349	350	8	00	355	15	00	346	9	13
349	346	346	348	348	346	346	346	346	350	9	00	355	22	54	343	12	14
356	355	354	355	355	356	356	355	355	353	16	00	356	0	00	346	10	15
351	351	350	347	349	349	347	344	345	353	8	00	359	22	44	343	16	16
348	...	...	...	...	...	...	...	...	...	11	55	351	14	00	345	6	17
...	347	348	347	344	340	337	334	343	...	...	...	...	...	...	...	...	18
345	345	342	338	338	340	342	344	346	349	8	18	360	14	48	336	24	19
(344)	345	346	347	347	347	347	346	347	347	7	55	360	12	00	338	22	20
346	346	348	348	347	346	345	346	349	346	8	20	354	11	00	340	14	21
338	346	346	341	338	340	341	342	343	347	7	16	367	14	51	326	41	22
357	358	355	352	351	348	348	347	349	350	16	51	360	12	00	332	28	23
345	344	349	346	345	344	342	341	338	348	7	49	375	11	57	325	50	24
337	339	343	345	345	343	343	343	345	341	7	27	351	12	30	324	27	25
341	344	346	346	345	350	347	345	348	343	7	00	354	11	00	326	28	26
344	340	331	319	316	319	314	313	318	339	7	34	357	23	36	311	46	27
316	321	322	320	322	327	327	329	326	327	7	49	350	13	39	290	60	28
335	330	331	335	334	333	333	333	333	335	11	00	347	0	33	322	25	29
330	326	332	335	336	335	334	334	343	337	7	33	349	17	00	326	23	30
336	336	340	338	339	340	337	344	338	339	7	35	352	11	12	327	25	31
346	346	347	346	346	346	345	345	346	348						21		
348	349	350	350	350	350	349	349	350	349						16		
349	350	351	351	348	348	348	347	348	349								

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34000; PLUS TABULAR QUANTITIES.

Day	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h
1	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4	365	365	366	367	367	367	364	358	354	352	350	354	358	363	363
5	364	366	366	368	368	367	366	363	358	356	353	351	356	356	362
6*	359	360	362	363	363	364	364	360	354	346	343	342	349	356	357
7*†	359	359	361	361	363	364	365	360	351	348	351	349	353	355	359
8	360	360	360	362	362	364	366	365	358	354	349	351	357	355	356
9	358	358	359	360	359	361	362	360	351	343	344	352	353	357	357
10	358	359	363	360	363	364	363	359	346	341	346	353	350	356	359
11	359	359	359	360	359	361	363	360	356	354	347	350	355	358	362
12*	360	359	359	359	360	360	363	362	355	348	352	362	363	359	361
13*	363	362	360	360	360	362	363	358	353	343	339	352	352	356	359
14	359	360	359	359	357	359	358	358	352	340	344	359	356	352	357
15	365	364	363	362	363	360	360	363	359	352	351	351	357	357	356
16*	365	366	364	364	364	364	363	358	348	343	353	361	364	364	360
17	364	364	364	363	362	361	362	360	356	348	356	359	359	359	359
18	367	370	369	370	368	366	367	366	360	356	355	360	367	364	365
19	369	369	368	367	368	366	363	359	353	354	353	360	363	361	362
20	366	366	370	371	370	369	368	365	360	356	354	353	360	365	367
21*	370	369	369	371	372	372	371	368	360	358	360	366	369	370	369
22*	366	366	368	369	371	372	372	367	362	361	363	366	367	366	366
23	364	367	367	368	370	371	371	369	366	355	357	360	359	359	362
24*†	364	362	364	365	366	369	370	369	368	364	358	359	357	356	358
25	361	362	362	362	367	367	369	368	363	363	366	362	363	360	359
26	369	368	366	366	367	370	372	370	367	366	363	363	365	365	366
27*	371	368	368	368	365	368	369	367	363	363	366	365	365	373	376
28	374	374	374	372	371	370	368	363	355	357	365	363	360	364	366
29*	368	369	368	368	368	366	368	368	367	370	374	371	370	370	371
30	374	374	371	377	364	365	370	367	360	358	355	360	359	358	361
31	371	372	373	372	373	370	370	369	370	370	366	368	369	374	374
Mean....	365	365	365	366	365	366	366	364	358	354	355	358	360	361	362
Mean*....	364	364	364	365	365	366	367	364	358	354	356	359	361	362	364
Mean†....	362	362	362	362	363	364	365	362	356	351	354	358	359	358	360

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34000; PLUS TABULAR QUANTITIES.

1*	369	370	371	370	369	368	367	365	361	357	355	352	355	360	360
2*	368	368	368	369	369	369	368	369	368	366	365	364	365	368	369
3*†	369	370	372	373	372	372	371	370	366	363	358	351	349	350	352
4*†	362	363	364	365	365	364	365	361	355	351	349	348	350	355	360
5*	360	362	362	362	364	364	362	361	359	357	355	354	354	353	351
6*	359	360	361	361	362	363	365	362	358	353	354	355	359	358	363
7	357	357	359	360	360	361	364	364	359	356	351	351	350	348	350
8	358	357	357	358	359	361	363	363	359	355	353	353	354	355	357
9	357	356	358	361	362	364	365	365	362	353	348	350	354	354	354
10*	358	357	358	360	360	363	364	365	361	359	360	360	360	357	360
11	363	362	362	362	362	362	365	365	361	357	354	356	357	357	357
12	362	353	357	361	363	361	364	365	358	354	350	350	346	347	347
13	361	360	357	366	360	359	361	361	357	354	353	348	343	346	353
14	364	367	361	357	355	360	364	365	363	362	363	358	358	355	358
15	371	370	369	372	368	368	369	366	362	359	362	364	365	365	363
16	370	369	369	365	365	366	363	362	361	354	351	349	352	354	355
17	363	365	365	363	363	363	363	363	359	357	356	361	362	361	361
18	364	367	368	369	369	368	371	370	367	367	367	363	358	360	364
19	362	364	363	367	367	369	370	364	363	360	361	363	363	363	359
20	363	363	366	367	369	369	371	371	367	(361)	353	356	357	(361)	367
21	360	361	364	367	369	370	373	373	365	361	363	361	360	364	364
22*	360	360	363	365	366	368	370	368	363	362	358	353	353	355	361
23*†	369	367	369	367	369	370	373	370	369	364	361	358	357	357	358
24†	359	359	359	360	361	364	366	368	365	363	360	359	358	357	359
25	365	366	363	366	361	358	364	363	365	365	366	371	371	367	364
26	369	362	363	359	364	360	363	366	360	359	361	360	358	354	355
27	368	365	363	363	361	361	363	365	365	367	365	365	362	358	359
28*†	367	366	366	366	363	363	363	362	363	361	360	357	357	357	361
Mean....	363	363	363	364	364	365	366	365	362	359	358	357	357	357	359
Mean*....	364	364	365	366	366	366	367	365	362	359	358	355	356	357	360
Mean†....	365	365	366	366	366	367	368	366	364	360	358	355	354	355	358

*Ten least disturbed days.

† Five international quiet days. Jan. 1 missing.

HOURLY VALUES OF VERTICAL INTENSITY.

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JANUARY, 1913.

34000r PLUS TABULAR QUANTITIES.

16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean	Maximum			Minimum			Range	Day
r	r	r	r	r	r	r	r	r	r	h	m	r	h	m	r	r	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
367	358	368	367	365	363	363	362	362	362	18	00	368	11	00	350	18	4
365	364	365	365	362	361	361	360	359	362	5	00	368	11	25	350	18	5
360	360	362	362	361	360	359	357	360	358	7	00	364	11	48	340	24	6
361	363	363	363	363	362	361	360	359	359	7	00	365	9	58	348	17	7
357	358	359	362	361	360	357	359	358	359	7	12	366	11	41	347	19	8
356	359	358	359	361	354	359	361	360	357	7	21	363	10	35	341	22	9
359	363	364	364	366	364	363	362	360	359	20	00	366	9	39	337	29	10
361	360	363	363	363	364	365	363	362	359	21	48	366	11	14	347	19	11
360	360	359	362	360	361	362	362	362	360	12	18	363	10	00	348	15	12
358	360	360	359	357	358	359	360	360	357	7	00	363	10	45	337	26	13
359	357	357	359	360	360	362	363	363	357	24	00	363	10	20	340	23	14
359	359	362	363	362	362	362	363	363	360	1	00	365	11	22	348	17	15
360	361	363	362	361	361	361	363	364	361	1	32	367	9	45	342	25	16
358	358	357	358	359	362	362	361	363	360	2	30	367	9	48	347	20	17
355	347	359	361	354	364	365	365	367	363	2	33	371	16	23	346	25	18
363	366	368	366	370	367	366	364	364	364	1	18	370	10	48	352	18	19
365	361	366	365	367	365	364	364	363	364	4	00	371	12	00	353	18	20
367	369	369	369	369	367	367	367	366	368	6	26	372	9	50	356	16	21
366	367	369	369	367	367	367	365	366	367	6	20	372	10	06	360	12	22
363	363	366	367	367	367	367	365	365	365	6	32	371	10	31	355	16	23
359	360	364	366	369	367	365	365	362	364	7	00	370	11	45	354	16	24
(363)	(368)	372	375	377	379	375	376	375	367	21	00	379	15	28	357	22	25
365	(367)	369	370	372	373	373	375	373	368	23	00	375	12	00	363	12	26
374	371	371	373	373	372	374	376	375	370	15	00	376	9	04	361	15	27
367	367	366	367	364	367	368	368	368	367	0	00	375	9	04	354	21	28
370	368	368	368	369	367	368	370	370	369	11	00	374	5	33	366	8	29
362	363	362	362	366	366	366	367	369	365	3	50	379	10	30	355	24	30
378	374	371	368	366	364	366	367	368	370	16	00	378	21	00	364	14	31
363	363	364	365	365	364	365	365	364	363							19	
364	364	365	365	365	364	364	364	364	363							17	
360	361	362	363	363	363	363	362	362	361								

FEBRUARY, 1913.

34000r PLUS TABULAR QUANTITIES.

16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean	Maximum			Minimum			Range	Day
r	r	r	r	r	r	r	r	r	r	h	m	r	h	m	r	r	
364	365	365	364	364	364	364	365	367	364	3	00	371	12	00	352	19	1
370	371	372	370	369	367	367	367	369	368	18	00	372	12	00	364	8	2
355	358	362	362	362	362	362	362	362	363	4	15	373	13	11	347	26	3
361	361	360	360	358	359	360	357	358	359	3	25	367	11	35	347	20	4
356	357	360	360	360	360	358	357	358	359	6	00	364	14	53	350	14	5
362	359	360	361	361	361	359	358	358	360	7	00	365	10	30	352	13	6
353	355	356	359	360	360	359	359	358	357	7	59	364	14	34	347	17	7
359	359	360	363	363	360	361	359	357	358	7	15	365	12	27	351	14	8
354	355	356	359	362	362	362	361	361	358	7	50	365	11	25	346	19	9
361	361	363	363	365	364	364	364	364	361	7	30	365	14	05	356	9	10
357	357	357	359	361	361	361	358	357	360	7	15	365	11	00	354	11	11
350	351	353	351	352	355	357	360	361	355	7	40	365	13	00	346	19	12
359	360	358	359	361	361	361	361	364	358	4	08	366	12	40	342	24	13
362	364	363	363	362	359	361	363	365	361	7	40	371	9	32	352	19	14
365	366	365	363	362	363	363	368	370	366	2	18	374	9	57	358	16	15
359	358	359	360	360	360	360	360	362	360	0	45	370	11	39	348	22	16
359	364	364	364	364	361	361	360	362	362	3	30	367	11	00	356	11	17
364	367	367	366	362	363	362	362	362	365	7	25	371	12	50	357	14	18
360	360	362	366	366	363	362	362	360	363	7	05	371	15	20	357	14	19
371	372	371	371	369	367	364	361	361	365	17	00	372	10	45	350	22	20
363	364	369	369	368	368	367	364	361	365	7	30	374	13	00	360	14	21
362	368	372	372	373	373	372	371	368	365	19	30	373	13	00	353	20	22
361	363	365	366	368	367	366	363	362	365	7	00	373	13	30	355	18	23
362	365	365	365	366	366	370	366	364	363	21	21	371	14	00	357	14	24
363	363	366	369	370	371	372	378	372	367	23	07	380	5	40	357	23	25
355	359	363	362	361	364	361	364	365	361	0	05	374	14	30	352	22	26
361	363	364	363	363	364	365	366	366	364	0	30	370	14	56	356	14	27
364	367	368	364	364	364	364	364	366	363	18	00	368	13	20	356	12	28
360	362	363	363	363	363	363	363	363	362							17	
362	363	365	364	364	364	364	363	363	363							16	
361	363	364	363	367	367	366	366	365	363								

MARCH, 1913.

34000_r PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Ndon	13 ^h	14 ^h	15 ^h
1*†	366	366	366	366	366	366	365	363	360	359	359	356	356	359	362
2*†	364	365	365	365	366	363	363	362	361	361	361	362	360	361	363
3*	365	366	366	367	367	367	368	367	363	359	359	359	363	363	(362)
4	369	366	367	370	369	369	371	373	366	362	365	367	368	368	368
5	370	371	370	372	373	371	370	368	362	361	360	360	361	361	362
6	360	363	363	364	367	368	369	366	369	367	362	360	361	361	362
7	366	368	370	371	374	376	378	377	371	365	362	362	362	366	365
8	364	363	366	367	368	370	372	369	363	358	356	359	359	359	363
9*	365	366	366	368	368	370	373	370	373	372	371	371	370	369	372
10*†	367	367	(368)	(368)	(368)	(369)	369	367	364	361	359	355	356	355	356
11	366	364	365	366	367	369	367	363	359	355	353	350	351	355	358
12*	364	364	363	362	362	363	364	363	363	362	358	355	356	360	363
13	365	365	365	363	363	364	365	363	363	360	359	358	357	359	363
14	365	367	354	358	362	363	363	360	360	360	371	372	369	368	367
15	371	368	371	367	367	368	365	376	372	372	372	372	371	372	369
16	373	373	374	372	372	373	373	373	373	370	367	369	361	371	373
17	378	376	376	376	376	372	371	371	371	370	368	368	368	370	368
18	382	375	378	378	378	376	375	375	376	377	380	380	380	379	377
19	376	378	380	380	378	375	373	374	374	373	374	376	374	374	374
20*	376	378	379	380	381	377	374	372	369	368	372	376	378	378	375
21	376	372	376	380	384	385	381	379	378	376	376	375	375	375	375
22	376	382	382	383	384	384	383	380	378	375	373	368	366	370	375
23	379	380	380	380	383	384	384	380	377	375	366	371	369	372	375
24*	376	375	376	379	377	380	381	377	374	371	369	368	369	375	377
25*	374	375	374	376	377	378	377	377	374	369	364	361	362	367	369
26†	377	374	372	373	375	376	375	373	375	375	374	377	375	376	379
27*†	382	381	379	379	378	379	378	379	383	385	383	380	380	378	374
28	380	381	378	378	381	380	378	377	378	377	372	368	371	369	369
29	385	385	384	384	382	380	377	377	378	376	373	361	368	375	375
30	376	378	380	382	380	381	375	374	372	372	371	371	375	375	376
31	377	377	378	378	378	379	375	371	374	371	379	380	384	389	381
Mean.....	372	372	372	373	373	373	373	371	370	368	367	367	367	369	369
Mean*.....	370	370	370	371	371	371	371	370	368	367	366	364	365	366	367
Mean†.....	371	371	370	370	371	371	370	369	369	368	367	366	365	366	367

APRIL, 1913.

34000_r PLUS TABULAR QUANTITIES.

1	380	383	384	385	384	382	380	380	380	378	377	377	378	381	384
2	384	386	383	384	383	382	380	377	376	376	377	378	382	387	387
3*	383	384	386	385	386	385	385	379	377	375	375	375	380	381	384
4	379	381	382	383	382	380	377	377	374	376	375	375	379	379	380
5*	381	382	383	384	385	385	380	374	372	369	368	368	373	376	377
6*†	379	380	376	377	377	379	374	372	374	371	367	364	370	374	376
7*	378	378	379	380	382	382	378	378	378	377	375	375	380	382	384
8	379	379	380	381	383	383	385	388	389	386	381	379	381	383	384
9	377	377	380	382	383	385	385	367	377	382	389	386	379	386	383
10	389	387	381	384	385	386	392	394	395	396	396	394	394	394	395
11	390	390	390	390	390	390	392	396	393	393	390	391	392	389	389
12	387	381	380	381	385	386	390	398	398	398	395	397	405	397	396
13	393	390	393	394	391	391	393	395	400	404	405	404	400	400	397
14	393	394	392	392	391	391	391	393	394	393	394	397	397	394	396
15	390	390	393	394	397	395	390	391	396	396	394	398	399	405	398
16	...	...	...	...	...	...	394	394	398	402	403	406	406	402	401
17	400	406	398	399	402	402	399	399	395	388	390	396	397	401	403
18*	404	405	405	406	406	403	396	396	393	395	400	406	407	404	403
19	399	400	402	404	405	405	402	401	397	394	398	404	406	405	407
20*†	399	400	402	403	405	405	403	401	399	399	399	399	402	401	400
21*†	394	395	397	401	401	402	397	394	391	392	393	390	390	394	398
22*†	394	396	396	399	399	402	398	398	391	386	387	392	392	394	397
23	394	394	390	396	396	399	395	391	395	396	393	393	394	396	400
24*	399	398	399	397	398	400	400	403	408	408	407	404	406	410	407
25*	401	401	400	399	398	399	394	394	401	408	409	407	403	407	411
26†	405	403	402	401	400	399	400	402	403	408	406	407	405	406	405
27	405	405	405	403	402	403	402	406	407	410	412	410	411	412	406
28	408	411	408	408	406	406	405	411	416	418	418	415	415	414	413
29	410	412	410	409	406	406	404	408	407	412	415	412	414	415	416
30	410	411	410	409	408	408	409	414	421	426	427	425	423	422	419
Mean.....	393	393	393	393	394	394	392	392	393	393	394	394	395	396	396
Mean*.....	391	392	392	393	394	394	390	389	388	388	388	388	390	392	394
Mean†.....	394	395	395	396	396	397	394	393	392	391	390	390	392	394	395

* Ten least disturbed days.

† Five international quiet days.

HOURLY VALUES OF VERTICAL INTENSITY.

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MARCH, 1913.

340007 PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>r</i>	
361	363	364	363	362	362	362	363	364	362	3	15	367	12	00	356	11	1
363	366	367	367	363	363	363	365	365	364	18	00	367	13	00	360	7	2
362	363	365	364	363	363	363	362	362	364	7	25	369	12	00	359	10	3
370	371	371	371	372	370	370	368	367	369	8	00	373	10	00	362	11	4
361	365	366	364	364	362	361	360	361	365	4	50	373	11	20	359	14	5
363	363	365	368	366	365	363	360	362	364	7	00	369	22	00	360	9	6
366	370	370	370	370	369	367	365	364	368	7	15	379	13	00	362	17	7
364	363	365	367	370	370	368	366	364	365	6	58	373	10	30	355	18	8
371	369	369	370	371	369	369	368	366	369	7	25	373	0	00	364	9	9
359	361	364	366	367	367	367	366	366	364	7	00	369	12	00	355	14	10
361	360	359	359	363	367	368	367	367	362	6	30	370	12	35	348	22	11
364	364	364	365	365	367	365	365	364	363	0	32	368	11	55	355	13	12
363	364	367	365	365	367	367	366	366	363	18	00	367	13	15	356	11	13
367	364	364	371	373	371	371	376	375	366	23	05	377	3	05	353	24	14
368	368	370	370	368	375	377	376	375	371	7	55	377	7	15	361	16	15
370	373	373	375	373	369	372	373	379	372	21	22	383	12	38	359	24	16
375	377	379	376	375	375	375	376	379	374	3	44	379	12	00	368	11	17
377	377	380	376	374	373	378	374	372	377	1	00	382	23	35	372	10	18
375	378	379	378	377	375	374	374	373	376	3	30	381	0	00	372	9	19
376	375	375	377	376	374	374	372	374	375	5	00	381	10	00	368	13	20
380	380	383	383	384	380	377	377	375	378	5	35	386	2	00	372	14	21
379	383	384	384	382	383	382	380	376	379	4	30	385	13	05	365	20	22
379	380	383	383	383	382	382	380	380	379	5	37	385	11	05	365	20	23
378	378	378	381	382	381	380	378	377	377	20	00	382	12	15	368	14	24
371	373	371	376	377	377	377	377	376	373	6	30	379	12	15	359	20	25
380	380	379	380	380	380	381	380	380	377	22	00	381	8	30	372	9	26
377	378	378	378	379	381	382	381	381	380	10	00	385	15	15	374	11	27
376	379	380	379	379	383	383	382	384	378	23	56	384	12	00	368	16	28
374	378	378	378	379	378	379	386	372	378	23	00	386	12	00	361	25	29
376	375	375	378	379	379	378	377	377	376	3	25	383	11	15	370	13	30
380	380	377	374	377	377	381	381	384	378	14	00	389	8	30	369	20	31
371	372	372	373	373	373	373	372	372	371							15	
368	369	370	371	370	370	370	370	370	369							12	
368	370	370	371	371	370	371	370	370	369								

APRIL, 1913.

340007 PLUS TABULAR QUANTITIES.

379	383	386	382	383	380	381	382	383	381	4	00	385	12	00	377	8	1
385	385	385	386	383	383	381	381	383	382	14	10	388	8	52	374	14	2
384	381	381	381	383	382	380	379	378	381	5	00	386	10	00	375	11	3
382	386	387	385	378	381	384	382	381	380	18	00	387	7	18	373	14	4
379	380	380	384	384	386	384	382	377	379	20	49	387	10	26	368	19	5
379	384	384	384	382	382	380	378	376	377	18	00	384	12	00	364	20	6
383	383	384	385	386	385	383	380	379	381	20	00	386	12	00	375	11	7
390	387	382	383	383	384	379	377	379	383	15	52	396	23	00	377	19	8
392	380	381	386	388	393	392	391	388	384	20	48	397	8	12	363	34	9
393	389	392	393	390	394	394	390	390	391	10	00	396	3	00	381	15	10
387	386	387	389	389	390	390	394	389	390	8	00	396	17	16	385	11	11
395	392	387	388	398	400	404	396	393	393	13	00	405	2	08	379	26	12
395	393	393	393	393	393	394	396	392	396	11	00	405	2	00	390	15	13
395	393	392	392	392	393	393	393	394	393	12	40	398	22	52	391	7	14
398	397	388	393	397	396	401	400	(399)	396	14	15	406	1	40	386	20	15
401	401	402	403	402	399	399	400	400	---	12	25	408	7	57	393	15	16
402	400	400	397	402	399	400	401	402	399	1	55	406	10	20	388	18	17
400	402	401	401	402	399	398	395	397	401	12	20	408	9	10	393	15	18
406	409	410	409	408	406	403	402	400	403	19	21	411	10	00	394	17	19
398	400	402	402	401	399	398	395	395	400	5	30	405	24	00	395	10	20
395	395	396	399	398	397	397	399	393	396	6	00	402	12	30	388	14	21
398	400	402	401	401	403	403	400	396	397	22	00	403	10	40	386	17	22
398	399	400	398	401	401	401	399	399	397	22	00	401	2	30	389	12	23
402	396	403	405	405	405	405	403	401	403	14	00	410	4	00	397	13	24
405	405	404	405	405	405	405	405	405	403	15	00	411	7	35	393	18	25
403	403	401	403	405	405	406	404	404	404	10	00	408	6	00	399	9	26
402	399	402	401	404	407	405	403	403	405	10	35	413	16	35	396	17	27
413	410	411	409	410	410	410	411	412	411	10	20	419	0	00	403	16	28
411	408	410	409	407	407	408	408	410	410	15	00	416	7	05	404	12	29
415	411	411	409	408	405	407	408	408	414	10	35	428	21	00	405	23	30
395	394	395	395	395	396	395	394	393	394							16	
392	393	394	395	395	394	393	392	390	392							15	
395	396	398	398	399	399	397	397	394	395								

MAY, 1913.

34000₇ PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1	409	410	409	409	407	408	406	410	412	412	412	410	415	409	406
2	404	406	408	408	404	404	400	401	405	407	407	407	407	412	411
3	403	403	403	405	405	407	400	404	(405)	405	405	404	403	404	407
4	402	405	405	404	400	406	408	404	409	409	409	408	408	411	416
5	399	406	416	413	413	415	416	414	412	410	416	417	417	413	415
6	...	...	...	...	...	...	405	399	406	408	405	407	412	414	413
7	408	410	412	415	416	418	412	410	414	415	417	415	413	413	412
8	411	411	411	412	413	414	414	416	421	421	420	419	420	420	418
9	411	411	411	411	412	413	411	414	417	417	417	415	411	411	412
10	418	415	417	418	417	418	416	420	421	421	423	422	419	419	418
11*	419	417	415	416	416	417	420	423	426	431	434	435	432	429	424
12*	419	419	416	415	415	415	417	421	424	429	429	433	431	432	428
13*	420	421	420	418	416	413	408	410	412	414	414	416	415	416	415
14*†	418	416	419	415	414	411	410	406	408	414	417	420	419	417	418
15*	414	417	417	417	418	415	408	408	407	408	415	421	416	421	421
16*	418	419	417	417	417	416	416	416	416	413	414	418	423	422	421
17	415	418	421	420	419	420	415	411	411	409	409	411	416	420	425
18	418	417	420	423	423	420	416	411	412	410	409	406	411	419	424
19	424	420	420	424	424	423	419	413	418	425	424	418	418	420	425
20*†	419	420	421	424	427	426	427	426	430	431	428	428	429	432	433
21*†	418	419	421	423	425	426	423	423	426	424	426	424	426	428	428
22*†	420	420	420	423	424	424	417	412	415	420	423	426	424	426	427
23†	421	421	420	420	420	419	417	414	413	417	422	421	423	420	421
24	419	418	417	417	417	419	415	409	409	407	415	420	421	424	424
25	421	421	421	422	420	421	419	419	423	427	431	429	428	429	429
26*	424	422	422	421	421	421	424	417	422	422	421	421	421	424	427
27	423	423	423	421	422	419	416	408	416	427	431	432	432	430	427
28	425	426	425	424	420	420	417	416	421	428	424	421	419	424	424
29	426	425	426	423	423	421	415	414	423	426	426	429	429	431	430
30	425	428	426	426	425	422	418	422	428	429	428	429	431	430	433
31	424	425	428	426	427	425	421	421	424	429	427	427	429	434	432
Mean.....	417	417	418	418	417	417	415	414	417	419	420	420	420	422	422
Mean*.....	419	419	419	419	419	418	417	416	419	421	422	424	424	425	424
Mean†.....	419	419	420	421	422	421	419	416	418	421	423	424	424	425	425

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34000₇ PLUS TABULAR QUANTITIES.

1	427	422	426	419	421	422	418	415	414	416	421	422	424	415	425
2	429	433	433	429	433	427	423	418	416	418	419	421	424	425	425
3	426	424	431	428	427	425	424	425	424	421	426	432	429	431	433
4	424	425	430	430	428	427	424	419	417	417	422	423	419	427	432
5	424	425	426	423	430	429	422	417	420	429	431	437	437	431	431
6*	423	424	425	428	428	428	424	422	427	431	436	434	434	428	430
7*†	426	426	426	428	431	431	430	427	422	425	428	423	418	422	427
8*†	428	427	425	428	429	430	428	427	424	423	422	424	424	428	429
9	427	426	426	426	425	425	422	421	426	432	433	435	430	428	429
10	431	431	430	430	430	427	426	426	431	434	431	430	424	424	425
11*†	431	431	431	431	431	427	429	429	433	438	438	440	427	423	428
12*†	431	429	429	427	428	427	425	428	433	435	435	436	432	429	434
13	431	434	433	432	429	429	425	425	425	427	429	434	439	436	432
14	428	428	428	430	430	427	425	424	426	427	429	427	429	431	434
15	430	431	432	434	435	432	427	421	426	427	428	430	433	440	440
16	433	435	435	440	434	432	432	430	429	428	431	435	436	435	435
17*	429	430	432	434	434	432	430	433	443	451	451	441	438	441	437
18*	431	432	432	435	437	437	430	426	426	433	437	437	437	435	437
19	431	430	431	431	433	433	433	433	433	435	433	432	435	441	449
20*	431	430	430	433	433	433	430	431	438	441	440	434	431	437	438
21	430	429	430	430	422	433	426	424	425	425	426	422	426	425	432
22*	429	428	428	429	431	431	430	431	435	439	436	433	435	435	436
23	428	428	428	426	430	431	428	433	433	435	435	439	437	435	434
24	432	432	432	434	429	428	432	431	433	439	444	443	441	440	437
25*	434	433	432	432	432	432	431	432	435	439	440	443	443	439	432
26	433	436	433	432	432	431	427	429	425	427	432	434	432	436	436
27†	437	437	437	437	437	436	432	430	427	428	432	432	431	435	437
28	437	436	433	433	433	432	427	428	430	432	429	432	429	429	432
29	424	437	438	436	437	435	433	429	427	431	435	439	444	445	448
30	440	440	438	439	440	435	433	427	431	434	434	438	437	445	447
Mean.....	430	430	431	431	431	430	428	426	428	431	432	433	432	432	434
Mean*.....	429	429	429	430	431	431	429	429	432	436	436	434	432	432	433
Mean†.....	431	430	430	430	431	430	429	428	428	430	431	431	426	427	431

* Ten least disturbed days.

† Five international quiet days.

HOURLY VALUES OF VERTICAL INTENSITY.

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MAY, 1913.

34000; PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum		Minimum		Range	Day	
<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>γ</i>	<i>h</i>	<i>m</i>	<i>γ</i>	<i>h</i>	<i>m</i>	<i>γ</i>	<i>γ</i>
407	407	406	403	403	402	402	402	403	407	12	58	416	21	00	402	14
411	409	409	410	408	405	403	403	402	406	14	30	414	7	11	399	15
406	407	407	406	405	403	402	402	404	404	16	27	409	7	00	400	9
411	411	408	408	406	409	402	397	391	406	14	55	418	24	00	391	27
418	417	419	422	---	---	---	---	---	---	19	10	422	0	12	391	31
418	408	410	411	418	410	407	404	410	---	21	27	421	7	36	398	23
413	413	413	413	416	416	414	414	410	413	7	42	419	1	50	408	11
411	407	411	414	416	416	415	413	412	415	10	00	421	17	00	407	14
412	413	417	417	420	418	417	417	419	414	19	48	421	2	30	409	12
421	421	420	420	420	420	421	421	420	419	11	00	423	2	40	414	9
423	418	417	416	419	420	419	421	420	422	11	40	436	18	50	415	21
427	422	417	415	414	417	418	420	420	421	12	02	433	5	30	414	19
412	412	411	410	410	411	415	417	416	414	2	00	421	6	55	407	14
415	416	416	414	413	414	414	414	414	415	12	07	421	8	00	406	15
422	418	418	415	414	414	414	414	416	415	16	00	422	7	28	407	15
421	420	418	416	416	415	413	412	414	417	13	00	423	22	31	411	12
426	425	422	420	419	417	416	416	417	417	15	20	427	8	22	407	20
424	422	423	423	420	421	417	418	418	418	5	13	424	11	50	406	18
426	426	428	427	426	422	421	419	418	422	19	20	429	8	00	413	16
429	427	428	427	426	423	422	420	419	426	15	00	433	0	00	418	15
427	426	427	427	426	424	423	422	420	424	14	00	428	1	00	418	10
423	421	421	424	425	424	424	422	420	422	15	00	427	7	46	411	16
420	418	420	424	424	424	423	421	420	420	20	00	424	7	57	413	11
420	420	423	423	424	421	420	420	423	419	15	24	427	10	00	407	20
425	424	425	423	425	425	425	424	425	424	11	12	433	7	05	418	15
425	422	424	423	423	422	423	423	423	423	15	00	427	8	15	417	10
424	421	421	422	422	425	423	423	425	423	12	52	433	8	00	408	25
425	422	421	422	422	422	421	423	423	422	10	00	428	7	25	413	15
431	424	424	425	423	424	425	424	425	425	14	08	434	7	35	414	20
433	429	427	425	422	422	421	421	422	426	14	54	433	6	48	418	15
434	431	427	425	421	421	423	425	425	426	14	00	434	21	13	420	14
421	419	419	419	418	418	417	417	417	418							16
422	420	420	419	419	418	418	418	418	420							15
423	422	422	423	423	421	421	420	419	421							

JUNE, 1913.

34000; PLUS TABULAR QUANTITIES.

431	432	418	422	420	426	407	420	425	421	15	47	432	21	45	405	27	1
427	426	426	426	424	422	422	421	424	425	5	00	433	8	15	415	18	2
430	430	431	430	427	426	426	425	424	427	15	18	434	23	30	420	14	3
432	431	429	428	428	426	424	424	424	425	15	48	434	7	43	415	19	4
434	432	432	432	431	431	432	428	425	429	12	38	438	8	20	417	21	5
432	432	431	430	431	431	429	427	426	429	11	15	436	8	00	422	14	6
432	431	431	431	432	431	431	430	430	428	20	00	432	13	00	418	14	7
428	429	429	428	429	429	429	429	427	427	6	00	430	11	00	422	8	8
425	426	426	426	428	428	431	431	432	428	11	54	435	7	30	418	17	9
422	423	426	427	430	431	431	431	430	428	10	00	434	16	00	422	12	10
430	428	428	430	428	428	429	430	431	430	11	56	441	14	00	423	18	11
435	430	430	429	427	428	428	429	431	430	11	25	438	6	53	424	14	12
432	429	428	425	425	424	423	424	427	429	13	00	439	22	00	423	16	13
432	431	429	429	427	427	425	423	426	428	14	45	435	23	15	422	13	14
439	438	437	436	433	433	432	433	432	432	14	16	442	8	18	419	23	15
436	433	434	433	431	430	429	428	428	433	4	05	440	23	24	427	13	16
436	436	435	435	435	434	433	430	431	436	10	24	452	0	00	428	24	17
436	437	436	435	433	432	430	430	429	433	11	31	440	8	30	425	15	18
442	437	435	438	438	438	434	433	429	435	15	00	449	1	12	429	20	19
438	434	435	433	434	433	433	433	431	434	9	25	441	7	18	427	14	20
431	429	429	431	430	430	433	433	433	429	23	00	433	11	45	421	12	21
433	431	431	432	431	432	432	432	433	432	10	08	439	2	00	428	11	22
433	430	431	435	434	435	435	435	435	433	12	20	439	4	00	426	13	23
436	437	434	435	435	436	435	435	436	435	10	52	444	4	45	428	16	24
434	432	432	432	433	433	433	433	436	434	12	21	444	4	30	430	14	25
434	432	433	432	433	433	433	435	434	432	15	00	436	8	58	425	11	26
436	433	433	434	434	433	434	435	439	434	24	00	439	9	00	427	12	27
430	437	430	429	432	433	432	432	432	432	0	18	439	6	27	427	12	28
444	440	437	437	437	436	433	436	439	437	15	08	450	0	42	422	28	29
444	443	436	435	433	434	434	435	435	437	14	38	447	8	00	427	20	30
433	432	431	431	431	431	430	430	430	431						16		
433	432	432	430	431	431	431	431	430	431						15		
432	430	430	430	431	431	431	431	430	430								

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34000_r PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1	435	434	436	438	437	436	432	426	426	421	422	430	433	441	447
2	433	435	438	439	438	438	433	432	(438)	443	439	434	437	444	447
3*	422	426	428	431	434	437	431	434	434	429	429	434	443	446	445
4†	421	422	423	426	429	430	430	427	426	426	425	426	429	434	431
5	407	408	411	415	420	425	423	425	429	433	434	438	439	440	440
6*	423	423	422	425	429	428	431	428	427	425	425	429	432	433	430
7	421	422	425	428	428	430	426	430	435	437	437	439	437	436	434
8*	430	430	430	431	434	436	431	429	431	438	446	442	438	436	435
9*†	429	429	428	427	431	431	430	427	433	430	434	439	439	442	439
10*	437	437	437	435	433	429	427	430	431	436	441	446	445	435	426
11	431	431	429	431	430	428	426	430	432	439	440	444	448	448	441
12	430	429	429	429	430	430	424	421	415	436	442	441	440	436	432
13	433	433	436	437	437	437	437	436	432	433	435	439	441	444	447
14	427	431	431	433	433	430	430	426	426	433	437	439	435	438	441
15	431	432	434	433	435	437	432	431	434	431	425	420	426	434	438
16	433	436	436	437	438	438	435	434	429	427	429	434	434	438	444
17*†	435	435	435	439	442	442	440	436	436	437	441	441	442	437	444
18*	430	431	433	438	442	443	440	436	434	435	436	436	438	439	439
19*†	433	433	434	435	438	439	437	433	437	442	445	444	436	436	437
20	429	429	432	431	430	432	432	434	438	442	447	445	445	441	439
21	435	430	430	431	435	433	434	436	435	438	...	...	...	...	...
22	433	431	426	430	431	434	435	432	432	431	433	429	432	435	436
23*	435	434	430	430	430	433	434	435	437	435	439	438	433	434	439
24	433	436	434	432	433	436	438	439	437	438	439	439	440	440	443
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	435	439	444	447	448	450	444	438	440	444	448	451	456	456	451
31*	436	438	437	439	441	441	437	436	440	440	441	445	446	447	447
Mean.....	430	430	431	433	434	435	432	431	432	434	436	438	438	440	440
Mean*.....	431	432	431	433	435	436	434	432	434	435	438	439	439	438	438
Mean†.....	430	430	430	432	435	436	434	431	433	434	436	438	436	437	438

AUGUST, 1913.

34000_r PLUS TABULAR QUANTITIES.

1*†	430	430	430	433	434	434	430	428	430	430	430	429	432	433	436
2*	432	433	432	437	439	441	440	435	439	443	443	440	441	446	453
3*	436	436	437	440	443	448	444	440	438	437	433	433	441	447	450
4	432	431	432	433	435	435	427	431	435	435	433	437	442	446	443
5*†	434	433	433	436	438	439	437	438	447	447	447	446	441	437	436
6	440	439	441	443	444	444	444	443	448	451	452	448	443	448	452
7	452	450	448	448	446	449	448	...	...	...	...	...	...	...	...
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	435	436	434	434	434	437	435	432	438	439	432	435	442	445	443
10	441	437	439	437	438	434	424	431	431	441	446	445	441	439	440
11	435	438	438	435	437	436	423	431	439	442	443	445	443	440	443
12	437	438	438	440	444	444	438	438	447	448	449	448	447	449	449
13	438	443	442	447	446	447	439	436	436	441	446	448	451	452	451
14	441	442	444	444	444	444	442	439	443	443	440	439	439	438	438
15	438	438	440	441	441	441	436	435	442	449	449	446	444	444	445
16	436	443	434	434	441	445	439	437	439	443	443	443	442	442	445
17	436	439	440	441	444	445	443	443	449	449	447	450	452	456	455
18	436	438	436	438	441	438	431	431	437	439	437	435	441	443	441
19*	442	439	438	440	439	441	435	433	432	430	431	435	441	440	442
20*†	439	438	437	440	443	445	445	444	443	443	440	437	440	442	444
21*	437	438	438	438	438	441	437	435	435	439	439	443	439	440	440
22*	438	438	438	439	441	442	437	434	439	439	443	444	438	436	442
23	439	439	436	436	434	434	430	428	435	441	441	441	446	447	445
24	442	440	437	439	437	437	432	428	431	434	436	441	447	446	442
25	439	439	437	436	437	437	429	428	435	437	438	440	440	441	443
26	443	445	443	441	441	440	438	434	432	(437)	(440)	(445)	447	449	449
27	447	450	449	448	447	447	438	433	436	443	444	453	452	452	446
28	439	439	441	443	445	442	436	440	446	448	449	449	449	449	446
29*†	441	443	446	446	445	442	434	438	448	451	450	452	450	449	450
30*†	445	440	443	445	448	446	434	435	443	447	448	444	443	441	444
31	436	440	443	444	447	447	437	435	442	442	443	444	446	446	446
Mean.....	438	439	438	440	441	441	436	435	439	442	442	443	443	444	445
Mean*.....	437	437	437	439	441	442	437	436	439	441	440	440	441	441	444
Mean†.....	438	437	438	440	442	441	436	437	442	444	443	442	441	440	442

* Ten least disturbed days.

† Five international quiet days. July 28 missing.

HOURLY VALUES OF VERTICAL INTENSITY.

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JULY, 1913.

 34000_r PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>r</i>	
440	437	434	435	435	433	434	435	435	434	14	52	450	10	00	421	29	1
444	435	430	430	425	420	419	420	422	434	15	00	447	21	50	419	28	2
441	433	432	432	428	424	422	420	421	432	14	18	446	23	12	419	27	3
427	422	422	418	417	414	411	410	408	423	13	40	434	24	00	408	26	4
435	431	435	434	434	429	427	428	425	428	13	35	443	0	38	407	36	5
429	430	433	429	429	428	426	424	423	428	13	33	434	3	00	422	12	6
438	428	430	434	436	436	436	435	433	432	15	47	440	0	47	419	21	7
436	432	434	434	433	434	434	433	433	434	11	00	446	2	13	429	17	8
437	434	435	436	436	437	437	438	438	434	14	00	442	3	45	427	15	9
424	428	429	429	429	429	431	433	433	433	12	15	447	16	00	424	23	10
439	434	431	428	427	427	427	428	431	433	13	30	448	7	00	426	22	11
437	435	432	428	431	430	432	432	431	431	11	57	443	8	52	412	31	12
444	441	439	431	426	424	425	428	433	435	15	00	447	20	20	423	24	13
438	437	435	434	429	430	430	429	430	433	14	30	442	8	33	422	20	14
440	438	436	436	437	434	434	434	433	433	16	00	440	12	00	420	20	15
440	437	437	437	436	436	436	436	436	436	15	00	444	10	30	425	19	16
444	438	440	440	436	435	432	431	431	438	15	34	446	24	00	431	15	17
441	436	436	440	439	438	436	435	435	437	6	00	443	1	30	427	16	18
440	439	439	439	437	434	433	433	430	437	10	55	449	24	00	430	19	19
437	436	435	439	437	437	430	432	436	436	12	42	450	3	20	429	21	20
...	441	440	442	441	439	437	436	434	...	...	...	450	2	00	430	20	21
439	438	436	438	437	434	436	435	436	434	16	00	439	3	30	425	14	22
440	439	437	437	438	438	438	438	436	436	11	30	440	3	00	430	10	23
440	...	...	...	...	...	...	...	...	...	13	20	443	4	30	432	11	24
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	25
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	26
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	27
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	28
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	29
448	439	438	439	435	432	432	432	435	...	15	00	450	...	...	...	...	30
443	443	442	439	435	435	436	437	436	443	13	32	460	21	07	435	25	31
444	443	440	436	434	430	429	427	427	438	14	00	447	23	47	426	21	
438	435	435	431	433	431	430	430	430	434							21	
438	435	436	435	434	433	432	431	431	435							18	
437	433	434	433	434	433	432	431	431	434								

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435	435	436	437	434	433	432	430	430	432	19	00	437	0	00	427	10	1
452	443	445	444	441	436	436	437	436	440	15	15	453	0	00	430	23	2
445	443	444	444	441	438	436	434	433	440	14	57	452	24	00	433	19	3
448	447	442	444	444	443	439	438	437	438	16	00	448	7	05	426	22	4
434	437	438	444	445	442	442	441	441	440	10	22	449	16	15	432	17	5
448	447	447	446	449	449	453	453	452	447	14	49	453	2	27	437	16	6
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7
435	436	437	436	436	434	434	437	435	...	...	...	...	...	...	...	...	8
441	438	435	438	434	439	442	442	442	438	14	00	445	0	32	432	13	9
436	437	437	437	434	435	433	436	435	437	11	26	447	7	18	421	26	10
438	434	435	434	435	435	434	434	438	437	11	34	446	7	01	422	24	11
452	452	445	448	447	443	443	439	441	444	16	00	452	1	19	433	19	12
447	444	445	446	443	442	441	440	439	444	13	30	453	8	30	434	19	13
440	438	442	445	443	441	439	439	440	441	19	00	445	14	21	435	10	14
444	446	444	440	439	439	437	437	438	441	10	20	449	7	38	432	17	15
445	438	440	441	438	438	438	437	437	440	15	40	447	2	42	432	15	16
451	449	450	446	444	442	439	438	437	445	14	00	456	1	00	436	20	17
441	442	445	445	445	444	445	443	443	440	19	00	445	7	25	429	16	18
442	440	444	445	445	446	445	444	441	440	21	00	446	10	00	430	16	19
446	445	445	444	445	445	441	441	439	342	16	00	446	3	00	437	9	20
441	437	439	442	442	442	442	441	441	439	12	00	443	7	27	434	9	21
443	443	443	442	442	442	442	440	440	440	11	50	445	7	40	431	14	22
444	438	443	445	443	438	440	443	443	440	14	17	448	7	23	428	20	23
439	439	439	438	438	438	439	439	439	438	13	30	447	8	00	428	19	24
442	439	438	437	442	442	443	445	444	439	23	00	445	8	00	428	17	25
446	445	443	442	444	442	442	441	444	442	14	00	449	9	00	432	17	26
446	442	442	441	439	439	440	438	439	444	13	15	454	8	00	433	21	27
443	442	443	443	440	439	439	439	440	443	13	04	451	7	08	435	16	28
449	449	449	446	440	438	440	440	441	445	12	30	454	7	00	434	20	29
448	448	449	446	442	440	438	437	437	443	18	00	449	7	15	432	17	30
446	447	448	451	448	447	445	442	440	444	19	00	451	8	25	434	17	31
444	442	443	443	442	441	440	440	440	441							17	
444	442	443	443	441	439	438	438	438	440							15	
442	443	443	443	441	439	438	438	437	440								

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34000_r PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1	442	441	444	447	446	446	434	434	437	433	430	434	434	435	436
2	436	440	442	445	446	446	433	431	434	435	429	425	432	433	438
3*	446	445	445	445	449	446	439	434	433	434	440	443	443	443	445
4*†	442	441	442	441	441	445	439	438	429	432	436	435	436	431	436
5	441	440	441	442	443	446	439	439	436	436	436	438	439	439	441
6	445	441	440	440	444	442	438	435	435	439	439	442	448	442	449
7	447	447	444	437	441	445	438	437	436	440	445	450	452	450	449
8	452	451	457	440	447	446	430	436	436	434	446	445	445	444	447
9	443	443	449	448	446	445	438	441	441	439	437	438	444	448	450
10	448	446	444	445	447	446	441	439	439	442	441	440	438	440	434
11	438	443	449	449	450	448	441	441	445	443	442	446	450	453	452
12	448	446	448	449	449	449	440	437	431	433	434	437	436	436	434
13	449	450	451	452	451	451	442	439	435	435	435	441	439	445	446
14	---	---	---	---	---	---	---	436	436	439	443	444	447	448	442
15†	449	446	443	446	447	449	441	438	432	436	440	446	447	448	445
16*	439	439	445	442	445	446	441	440	437	438	439	441	444	448	447
17*	452	448	449	451	452	452	447	448	447	447	442	441	444	437	440
18	445	446	446	445	448	449	443	438	432	433	440	439	440	440	443
19	447	447	450	451	451	453	447	443	440	440	442	442	445	450	454
20*†	446	446	445	445	445	444	443	439	441	438	441	445	445	447	448
21*	452	451	451	451	451	453	452	455	454	452	450	447	446	447	449
22	456	454	454	451	452	458	450	450	447	444	440	443	445	455	458
23	463	464	457	457	460	456	449	446	447	445	449	453	456	453	453
24	456	456	455	454	454	450	442	443	441	444	445	449	453	453	453
25	453	460	456	457	454	454	450	450	451	451	451	451	453	455	457
26*	455	457	459	456	456	455	447	444	444	446	448	453	457	457	455
27*†	454	457	457	457	456	454	447	445	449	449	449	453	455	455	456
28*	450	450	454	458	457	455	450	443	438	438	438	441	448	449	452
29*†	449	451	452	455	455	455	448	443	440	442	440	440	442	447	446
30	447	450	447	454	457	458	454	450	446	443	442	439	438	440	448
Mean.....	448	448	449	448	450	450	443	441	440	440	441	443	445	446	447
Mean*.....	448	448	450	450	451	450	445	443	441	442	442	444	446	446	447
Mean†.....	448	448	448	449	449	449	444	441	438	439	441	444	445	446	446

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34000_r PLUS TABULAR QUANTITIES.

1*	451	453	455	455	457	459	457	450	448	449	448	444	439	442	446
2*†	449	447	448	449	453	454	454	449	445	442	442	437	440	442	444
3*†	451	451	451	454	454	454	452	448	448	448	452	449	446	446	447
4	451	451	451	451	450	452	449	450	449	449	450	447	445	446	450
5	465	455	460	460	459	458	453	450	450	450	451	453	454	454	452
6	449	461	446	457	449	450	452	445	440	444	448	452	453	454	454
7	460	456	461	460	453	452	454	451	442	(447)	(452)	458	457	451	440
8	454	455	458	459	456	457	457	455	454	454	452	457	457	453	445
9	447	450	453	454	454	453	450	450	448	455	454	457	449	452	453
10	462	464	459	463	465	463	458	452	458	460	461	458	460	467	463
11	462	458	459	462	462	461	455	450	450	451	454	457	454	452	452
12	453	454	456	456	458	458	453	445	439	440	441	445	447	451	457
13	455	459	461	461	460	461	456	452	450	452	453	458	455	457	458
14	454	455	458	459	460	459	454	452	452	453	454	457	456	460	461
15	451	453	456	456	459	459	452	446	446	446	448	449	447	445	448
16*	454	455	456	455	458	459	459	455	451	450	448	450	450	452	452
17*	454	454	455	456	457	458	455	449	447	448	448	447	439	445	448
18	456	456	457	461	462	463	462	457	452	451	452	452	452	445	445
19	461	468	466	468	467	467	468	466	467	465	465	466	459	457	454
20	453	453	457	459	467	458	459	454	458	457	459	457	458	458	(457)
21	456	459	459	459	460	460	460	458	455	453	452	451	455	457	455
22*	456	455	454	455	456	457	454	454	456	458	458	456	455	457	456
23*†	458	458	457	456	456	457	455	454	450	450	451	451	449	452	454
24*†	457	456	457	457	456	457	459	458	456	457	456	457	457	457	457
25	458	457	458	459	458	457	455	450	449	445	449	452	454	458	454
26	460	462	464	465	465	462	460	452	449	450	453	454	449	451	457
27	457	460	461	462	461	461	460	458	456	457	458	457	452	454	459
28*†	459	462	465	468	468	468	465	460	458	454	454	454	458	462	463
29*	458	463	465	466	(468)	(468)	(466)	461	459	459	459	460	459	461	462
30	459	459	460	462	466	467	463	459	455	452	449	450	454	455	456
31	461	464	462	464	467	467	468	462	457	454	451	448	448	449	453
Mean.....	456	457	458	459	459	459	457	453	451	452	452	453	452	453	453
Mean*.....	455	455	456	457	458	459	458	454	452	452	452	450	449	452	453
Mean†.....	455	455	456	457	457	458	457	454	451	450	451	450	450	452	453

*Ten least disturbed days.

† Five international quiet days. September 15 used instead of 14.

HOURLY VALUES OF VERTICAL INTENSITY.

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16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>r</i>	
441	446	447	449	449	447	446	441	440	441	19	00	449	10	35	430	19	1
443	446	446	448	448	448	447	445	444	440	20	00	448	11	42	423	25	2
449	445	448	449	449	448	449	447	444	444	22	00	449	9	00	433	16	3
(435)	434	436	439	439	442	441	440	439	438	6	00	445	9	00	429	16	4
440	438	442	442	445	442	439	445	446	441	6	00	446	11	21	434	12	5
443	439	437	438	444	444	444	446	444	442	15	00	449	8	48	434	15	6
449	445	440	440	446	443	439	439	447	444	13	05	453	8	40	434	19	7
448	449	448	441	436	441	443	446	455	444	2	16	461	7	27	429	32	8
449	442	442	442	442	442	443	440	441	443	0	14	465	7	02	437	28	9
437	438	439	434	434	437	437	435	436	440	5	30	448	19	22	429	19	10
454	447	447	446	446	444	441	442	444	446	13	37	454	0	00	436	18	11
441	448	450	449	449	449	447	447	447	443	5	40	451	9	12	429	22	12
450	451	452	452	451	---	---	---	---	---	2	10	456	10	15	434	22	13
443	443	447	449	448	447	445	444	444	---	13	36	449	8	33	433	16	14
447	448	451	449	450	450	450	444	448	445	18	00	451	8	48	432	19	15
449	453	456	456	455	455	453	452	451	446	18	30	456	1	40	436	20	16
442	444	449	450	450	450	450	446	446	447	6	00	452	14	19	436	16	17
444	444	449	451	452	451	451	452	450	445	20	35	453	9	12	430	23	18
451	449	449	452	452	452	451	451	449	448	5	35	454	10	00	440	14	19
450	450	451	453	453	456	455	453	453	447	22	06	456	10	00	438	18	20
454	456	458	458	459	459	459	458	458	453	22	12	459	12	46	444	15	21
451	451	452	449	444	448	455	458	463	451	24	00	463	20	22	440	23	22
454	454	455	456	455	455	456	457	459	455	2	00	464	8	35	445	19	23
451	450	450	451	453	451	451	455	455	451	0	00	459	7	37	439	20	24
458	457	456	454	454	455	454	455	455	454	2	00	460	7	10	448	12	25
459	458	456	454	452	452	452	453	455	453	2	48	459	7	40	443	16	26
459	460	459	456	452	449	448	449	449	453	17	22	460	8	00	445	15	27
453	454	456	455	452	450	448	447	448	449	3	50	459	9	00	438	21	28
449	453	455	456	453	452	449	449	448	449	19	00	456	11	35	439	17	29
454	457	461	460	458	455	454	454	450	451	18	00	461	12	46	436	25	30
448	448	449	449	449	449	448	448	449	447							19	
450	451	452	453	451	451	450	449	449	448							17	
448	449	450	451	451	450	449	448	448	447								

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450	453	455	457	455	454	453	451	450	451	6	00	459	13	00	439	20	1
449	452	456	457	458	459	458	456	454	450	21	00	459	12	00	437	22	2
447	447	451	454	456	456	457	455	453	451	22	00	457	15	35	446	11	3
452	453	455	455	452	444	447	448	454	450	17	25	461	21	09	444	17	4
453	456	455	455	454	453	455	450	451	454	0	52	466	8	25	447	19	5
455	456	456	455	455	454	455	455	464	452	24	00	464	9	05	440	24	6
451	451	451	451	452	452	456	450	456	453	0	00	464	15	06	439	25	7
445	452	454	455	450	451	450	450	449	453	3	18	466	16	15	440	26	8
454	453	454	448	447	454	456	456	458	452	24	00	458	0	30	447	11	9
465	471	466	464	463	461	459	458	458	462	16	52	471	8	06	451	20	10
456	458	456	454	454	452	451	451	452	455	1	05	462	8	18	449	13	11
457	458	458	457	458	457	456	454	454	453	4	52	459	9	47	439	20	12
456	462	461	460	459	457	455	455	454	457	2	35	463	9	13	450	13	13
457	459	459	457	458	456	454	451	454	456	5	22	461	22	45	450	11	14
449	453	457	457	457	455	456	453	454	452	4	38	460	14	00	445	15	15
453	458	457	456	456	458	459	457	456	455	6	48	459	10	38	448	11	16
451	454	455	457	458	457	458	457	458	453	24	00	458	12	50	439	19	17
450	455	459	461	463	468	466	470	468	458	23	05	470	14	16	439	31	18
457	458	462	462	464	465	464	463	460	463	7	32	468	15	22	453	15	19
(456)	455	456	456	454	455	458	457	456	457	4	35	468	1	42	451	17	20
453	451	451	454	454	455	455	457	457	456	6	37	460	16	35	450	10	21
450	447	451	453	455	455	456	458	459	455	24	00	459	17	00	447	12	22
453	453	454	453	453	453	454	456	458	454	0	00	459	13	20	449	10	23
459	461	460	458	455	455	456	457	458	457	17	18	461	21	00	455	6	24
453	456	457	454	458	460	459	459	460	455	24	00	460	10	02	444	16	25
463	466	465	462	460	459	457	456	458	458	17	00	466	9	17	448	18	26
465	465	464	462	459	458	457	457	459	459	16	30	465	13	00	452	13	27
466	468	468	468	465	462	459	459	460	462	4	33	470	11	21	453	17	28
464	464	466	466	465	463	461	459	459	463	6	00	(468)	23	50	458	10	29
459	461	461	457	459	459	462	463	466	459	6	16	467	11	10	449	18	30
456	460	462	461	464	465	462	462	461	460	4	40	470	13	00	448	22	31
455	457	458	457	457	457	457	456	457	456							17	
454	456	457	458	458	457	457	456	457	455							14	
455	456	458	458	456	456	456	456	456	455								

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34000_r PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1	461	462	463	461	464	463	464	462	460	459	457	451	457	456	453
2	459	462	454	459	458	457	461	457	450	448	451	457	462	461	463
3	467	465	463	464	462	463	461	458	457	452	454	454	455	457	458
4*†	463	463	460	460	459	459	457	454	453	452	(453)	454	454	453	453
5*	464	464	463	461	462	459	457	456	454	453	457	454	459	457	457
6	464	463	461	461	460	460	462	456	454	453	455	458	459	458	456
7	469	466	466	466	463	463	460	457	456	458	455	451	458	458	461
8	465	470	463	463	463	462	461	459	457	456	456	461	465	462	463
9	468	471	468	469	467	467	467	466	461	459	463	463	463	461	464
10	(467)	(469)	(467)	(468)	(467)	(466)	(464)	460	457	459	458	(463)	464	466	469
11	465	467	469	469	469	468	463	458	452	449	451	455	457	459	464
12	466	466	466	468	468	467	464	458	453	448	450	455	453	458	463
13	460	464	466	468	467	470	466	463	459	457	456	457	458	461	464
14*†	465	466	467	469	470	470	469	466	463	458	459	461	465	468	471
15*†	464	466	468	468	468	470	470	466	461	459	462	468	467	466	466
16*†	466	466	467	467	468	468	468	468	466	463	462	462	459	460	463
17	465	464	464	466	466	466	465	459	456	457	457	451	448	447	452
18	465	463	465	465	464	464	464	459	459	457	457	460	461	462	466
19	464	465	465	464	465	465	464	460	458	454	452	450	451	456	457
20	467	466	464	463	463	463	465	464	464	467	466	466	464	460	463
21*	468	468	467	466	465	465	467	468	466	466	464	465	467	466	466
22*	470	469	470	468	465	464	465	461	460	461	464	466	466	463	465
23*	472	472	472	470	469	467	465	461	459	461	465	472	476	473	474
24*	470	470	472	471	470	468	467	462	455	452	454	458	461	461	466
25*†	470	473	474	474	474	473	469	461	457	457	456	462	466	466	467
26	467	470	470	472	472	470	466	464	463	456	457	460	463	462	466
27	464	466	469	469	470	471	470	465	463	459	460	462	466	468	470
28	467	464	475	467	471	470	469	466	458	454	453	453	447	449	456
29	464	468	467	468	472	471	470	466	462	453	453	452	451	455	458
30	463	464	465	469	469	469	471	467	460	454	453	454	453	456	461
Mean.....	466	466	466	466	466	466	465	462	458	456	457	458	460	460	462
Mean*.....	467	468	468	467	467	466	465	462	459	458	460	462	464	463	465
Mean†.....	466	467	467	468	468	468	467	463	460	458	458	461	462	463	464

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1	466	465	465	466	466	469	469	469	468	465	461	453	459	463	460
2	465	464	464	465	467	470	469	468	464	460	462	465	465	463	467
3	467	465	465	463	463	463	462	461	460	458	457	460	461	463	462
4	467	467	467	466	466	465	470	467	462	(462)	(462)	(461)	461	467	461
5	467	468	475	469	470	470	473	473	470	472	473	471	473	476	473
6	467	467	467	468	466	467	469	468	468	463	461	463	467	467	468
7	468	469	469	470	468	469	465	463	464	464	466	461	462	461	461
8	469	470	469	470	470	469	468	467	463	461	461	462	462	462	466
9	472	472	473	471	471	471	471	467	464	460	459	462	468	470	467
10*†	468	470	471	471	470	469	470	468	(467)	466	467	467	469	469	475
11*†	472	474	476	475	475	474	475	472	467	464	463	467	468	468	468
12*	465	468	468	470	470	471	473	471	467	462	460	459	460	465	468
13*†	468	470	471	472	473	473	474	466	460	455	454	453	459	463	469
14	(469)	(471)	(471)	(473)	(474)	474	476	469	464	465	462	466	470	470	470
15*	465	466	468	471	472	472	474	472	468	463	458	452	453	460	463
16	469	470	470	472	474	474	476	472	472	471	470	462	464	464	467
17*†	466	468	466	468	469	470	472	470	467	462	461	460	462	467	471
18*	469	469	468	469	468	470	471	466	460	458	460	458	(462)	467	468
19	471	472	474	474	471	474	475	472	467	462	462	459	464	466	459
20	475	476	472	472	472	473	476	472	471	469	467	469	473	473	473
21*	478	477	477	475	475	473	472	469	464	459	459	467	469	470	470
22*	474	474	474	473	471	471	469	466	465	465	464	456	461	467	476
23*†	476	477	477	477	475	474	473	470	(470)	470	470	467	464	466	473
24	476	478	479	479	479	476	476	470	464	461	458	456	461	467	471
25	470	473	484	483	483	483	483	474	471	464	463	457	458	466	472
26	477	481	478	478	480	479	477	472	470	467	465	461	456	460	465
27	469	473	474	475	477	477	476	473	471	466	463	461	460	463	468
28	472	473	474	475	475	477	479	478	473	471	468	465	462	467	469
29	470	471	471	473	474	475	475	473	471	(465)	(464)	(463)	(461)	(464)	(467)
30	473	473	473	473	473	473	475	474	466	464	461	460	460	466	470
31	473	471	469	470	470	471	474	473	465	462	467	470	467	468	469
Mean.....	470	471	472	472	472	472	473	470	467	464	463	462	463	466	468
Mean*.....	470	471	472	472	472	472	472	469	466	462	462	461	463	466	470
Mean†.....	470	472	472	473	472	472	473	469	466	463	463	463	464	467	471

* Ten least disturbed days.

† Five international quiet days.

HOURLY VALUES OF VERTICAL INTENSITY.

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NOVEMBER, 1913.

34000_r PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>r</i>	
454	457	461	462	462	460	461	461	460	460	7	04	465	12	00	451	14	1
461	459	456	461	465	464	464	468	475	460	24	00	475	10	26	447	28	2
456	458	459	461	462	462	463	464	464	460	0	00	475	10	08	451	24	3
458	459	459	460	461	462	463	464	465	458	24	00	465	10	00	452	13	4
460	461	459	460	460	461	462	464	466	460	24	00	466	10	00	453	13	5
461	462	460	457	457	458	458	462	469	459	24	00	469	9	27	453	16	6
464	466	463	460	466	461	463	462	464	461	3	22	469	11	48	449	20	7
464	464	463	463	464	464	464	466	466	463	1	45	472	9	23	454	18	8
466	467	465	464	464	463	464	(464)	(466)	465	1	41	473	9	30	457	16	9
471	470	469	467	466	464	463	464	465	465	..	..	470	..	..	456	14	10
463	465	466	465	464	459	456	460	465	462	4	55	470	10	00	449	21	11
467	468	466	466	465	464	464	463	467	462	5	15	469	10	20	447	22	12
465	468	469	470	468	467	467	466	467	464	5	08	471	10	30	455	16	13
470	470	471	471	470	469	466	465	466	467	15	00	471	10	18	457	14	14
467	468	469	470	469	469	469	467	467	467	6	45	471	10	20	458	13	15
464	466	466	468	469	469	468	468	466	466	6	45	469	13	27	458	11	16
461	462	464	466	467	468	468	467	468	461	23	35	468	13	53	446	22	17
466	465	464	464	466	466	467	467	467	463	0	00	468	11	00	457	11	18
459	459	459	462	464	465	467	468	468	461	23	30	470	12	23	447	23	19
462	464	462	462	462	466	467	469	470	465	23	35	470	14	00	460	10	20
465	462	462	464	463	465	466	467	469	466	0	00	470	18	00	462	8	21
467	467	466	466	464	466	467	470	473	466	24	00	473	9	20	459	14	22
473	467	463	464	463	464	466	466	469	468	13	10	476	9	30	459	17	23
467	467	467	466	466	465	465	465	468	465	3	30	472	10	00	452	20	24
467	467	467	467	464	462	463	463	466	466	3	00	474	10	52	456	18	25
470	472	471	470	468	465	466	466	465	466	17	25	473	10	15	456	17	26
467	467	467	467	465	465	465	468	469	466	14	15	471	10	18	458	13	27
463	466	466	469	470	469	468	467	467	464	3	05	477	13	27	445	32	28
463	467	469	469	469	468	467	467	466	464	5	10	472	13	00	451	21	29
461	466	465	469	469	470	467	466	469	464	6	40	471	10	43	452	19	30
464	465	464	465	465	465	465	465	467	463							17	
466	465	465	466	465	466	466	466	467	465							14	
465	466	466	467	467	466	466	465	466	465								

DECEMBER, 1913.

34000_r PLUS TABULAR QUANTITIES.

462	464	463	464	466	468	469	468	467	465	7 48	469	12 00	453	16	1
467	466	466	469	469	469	469	469	468	466	6 55	471	10 15	459	12	2
462	461	461	462	464	466	466	468	468	463	23 48	470	10 55	457	13	3
470	467	466	464	463	463	465	466	467	465	7 11	470	12 33	459	11	4
469	467	462	458	458	461	464	466	467	469	14 00	476	19 30	458	18	5
465	466	464	462	462	462	463	465	468	466	7 12	469	10 25	461	8	6
468	470	467	466	465	465	465	465	466	466	4 05	470	14 12	459	11	7
471	467	468	468	467	466	467	469	469	467	3 50	471	11 10	461	10	8
470	469	466	463	463	463	463	463	465	467	3 10	474	10 49	459	15	9
477	475	473	471	469	468	467	467	469	470	16 00	477	0 00	465	12	10
472	471	468	466	464	462	463	462	463	469	4 17	476	23 00	462	14	11
469	471	472	472	470	468	466	466	466	467	7 00	473	12 30	458	15	13
473	474	473	474	473	471	470	469	469	468	6 45	475	11 35	453	22	13
477	477	475	473	472	469	467	466	467	470	16 00	477	11 00	462	15	14
468	473	473	474	474	474	473	472	469	468	7 15	474	12 00	452	22	15
466	466	467	467	467	469	470	468	467	469	7 00	476	12 20	462	14	16
473	470	467	467	467	468	471	471	471	468	16 00	473	11 40	460	13	17
468	467	467	469	471	471	470	470	471	467	7 00	471	11 54	458	13	18
458	461	464	466	470	471	473	475	475	468	7 40	476	16 00	458	18	19
475	473	472	471	472	472	474	477	478	473	24 00	478	11 10	467	11	20
470	470	464	464	464	465	467	468	472	469	1 00	478	10 38	457	21	21
476	475	471	471	469	469	470	472	475	470	15 20	477	12 00	456	21	22
476	479	476	474	473	472	473	475	477	473	17 00	479	12 58	464	15	23
476	477	475	472	472	471	471	470	472	471	3 55	479	12 00	456	23	24
474	472	477	478	476	472	470	473	475	473	6 55	484	12 30	456	28	25
470	471	472	474	473	473	471	469	470	471	2 20	485	12 50	456	29	26
472	474	477	477	476	475	474	472	471	471	4 45	478	13 05	459	19	27
470	471	475	475	475	475	475	473	470	472	7 30	479	12 38	462	17	28
469	471	473	475	476	478	476	475	474	471	21 00	478	(13 00)	(461)	17	29
474	476	474	473	474	473	472	472	472	471	7 15	476	11 18	459	17	30
470	472	473	474	474	474	474	474	473	471	7 25	476	10 00	462	14	31
470	470	470	469	469	469	469	470	470	469					16	
472	472	470	470	469	469	469	469	470	469					17	
474	474	471	470	468	467	467	467	468	469						

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34000r PLUS TABULAR QUANTITIES.

Day	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h
1*	472	470	471	470	469	469	471	473	473	473	469	465	467	468	471
2	469	468	468	465	465	466	468	472	469	466	461	462	459	464	462
3	469	469	469	467	465	465	468	464	460	457	459	461	463	462	464
4	471	471	467	467	466	465	467	470	467	462	457	457	459	464	462
5	470	471	472	469	469	466	468	466	461	457	462	465	469	470	468
6	468	470	468	466	466	465	466	464	459	453	(454)	(458)	461	463	468
7	468	469	470	472	471	472	473	472	470	467	461	467	470	477	473
8	467	465	467	471	471	472	476	477	471	466	462	463	468	471	474
9*†	471	470	473	474	475	474	475	473	467	462	459	461	466	469	475
10*†	473	474	475	477	476	476	473	468	457	443	446	450	453	460	470
11*	466	467	470	470	470	471	470	469	460	455	455	459	460	467	470
12	464	463	466	469	467	466	469	469	463	454	456	458	455	458	462
13	468	468	467	468	470	470	470	468	455	448	454	455	452	456	458
14	468	471	470	471	472	472	473	468	463	458	465	468	468	465	462
15	469	473	475	475	475	473	473	467	462	463	466	466	462	465	465
16	478	482	478	478	477	474	476	472	472	473	468	468	474	471	471
17	470	470	470	469	468	472	466	470	470	466	470	473	473	472	470
18*	473	472	473	472	470	469	469	469	469	465	466	469	468	472	470
19*	481	478	478	478	475	474	475	474	470	470	470	472	476	477	477
20	...	...	...	...	...	...	...	463	459	...	...	460	465	467	468
21	479	480	479	479	478	475	475	475	475	471	468	468	476	475	472
22	484	485	486	487	484	481	480	476	472	468	472	477	476	480	484
23*	487	488	490	490	490	487	486	480	475	470	475	482	482	482	483
24*†	487	488	490	490	488	487	486	483	479	472	471	474	477	483	484
25*†	482	484	485	487	487	486	484	483	477	474	472	469	471	473	476
26†	481	482	480	483	482	482	482	480	477	476	473	467	466	467	469
27*	474	472	472	474	474	476	477	476	473	469	469	467	465	465	472
28	482	481	482	482	481	484	481	478	475	469	466	466	468	466	465
29	480	478	477	479	479	480	480	481	478	472	469	468	468	467	469
30	480	477	479	479	479	478	479	478	479	477	471	470	470	467	468
31	480	478	479	478	475	477	477	474	469	466	466	462	459	460	467
Mean.....	474	474	475	475	474	474	474	473	469	465	464	466	467	469	470
Mean*.....	477	476	478	478	477	477	477	475	470	465	465	467	468	472	475
Mean†.....	479	480	481	482	482	481	480	477	471	465	464	464	467	470	475

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34000r PLUS TABULAR QUANTITIES.

1*†	480	479	479	477	477	477	475	473	472	470	468	469	469	469	466
2	478	478	480	476	475	475	476	469	467	464	465	468	468	469	474
3	483	480	479	476	476	476	478	479	475	472	472	465	464	470	475
4	488	481	480	479	478	475	477	478	471	469	476	481	480	469	473
5	485	484	481	480	479	477	477	478	475	480	480	478	477	476	476
6	484	487	484	485	484	482	481	478	480	477	479	480	475	473	473
7	486	486	484	480	480	477	476	474	472	471	468	467	468	475	477
8*	484	485	484	485	483	479	478	475	471	469	468	464	467	475	478
9*	487	489	491	491	491	487	489	484	478	474	473	472	472	472	474
10*†	479	480	479	478	480	478	478	474	470	464	462	460	461	466	466
11*†	471	471	471	474	474	474	474	474	467	462	459	460	458	458	461
12*	477	477	479	478	478	480	482	481	478	472	464	463	460	460	461
13	480	480	480	480	481	480	483	484	480	477	472	470	466	469	473
14	481	479	477	476	475	475	476	479	479	478	472	471	471	470	473
15	484	481	483	480	480	480	482	485	485	484	484	483	480	477	475
16	494	492	490	489	487	486	486	489	486	486	489	489	488	484	485
17	502	502	499	496	495	495	498	499	496	497	498	499	495	489	488
18	508	511	508	504	502	501	499	499	494	491	491	490	494	492	488
19	499	498	495	491	486	483	483	480	480	476	479	483	484	484	485
20	489	489	488	487	485	482	479	476	473	475	477	477	477	478	482
21*†	491	489	493	493	487	484	482	480	476	476	480	479	475	469	475
22	487	489	490	490	491	492	495	501	491	488	490	487	484	484	488
23	496	494	496	493	493	489	493	490	482	477	479	478	476	473	476
24	488	493	494	491	491	494	492	491	488	485	485	483	483	480	483
25*†	491	490	491	490	491	490	488	484	484	481	477	471	472	475	476
26*	484	486	487	490	490	490	(492)	493	496	498	496	493	493	491	490
27*	492	493	492	492	492	493	494	491	486	485	489	493	495	496	497
28	492	492	490	491	491	491	493	491	485	482	481	481	483	482	481
Mean.....	487	487	487	485	485	484	484	483	480	478	478	477	476	476	477
Mean*.....	484	484	485	485	484	483	483	481	478	475	474	472	472	473	474
Mean†.....	482	482	483	482	482	481	479	477	474	471	469	468	467	467	469

* Ten least disturbed days.

† Five international quiet days.

JANUARY, 1914.

34000_r PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>r</i>	
470	471	469	468	468	468	468	468	469	470	9	05	475	12	00	465	10	1
463	463	465	465	467	467	469	469	470	466	7	40	472	13	00	459	13	2
464	464	464	465	466	467	467	468	471	465	24	00	471	9	56	456	15	3
462	465	466	460	455	457	466	474	472	465	23	11	476	19	43	451	25	4
472	466	466	466	463	466	466	467	467	467	0	35	475	9	51	454	21	5
471	470	473	470	467	470	468	468	469	466	2	04	477	10	00	453	24	6
471	469	470	465	465	463	464	465	466	469	14	00	477	11	00	461	16	7
479	472	474	475	474	472	470	469	471	471	16	00	479	11	00	462	17	8
477	479	477	479	477	476	473	474	473	472	19	00	479	11	25	459	20	9
475	468	471	469	468	466	465	465	465	466	4	00	477	10	15	442	35	10
467	468	468	468	468	468	466	467	467	466	6	00	471	10	00	455	16	11
468	473	477	479	477	477	476	473	474	467	18	48	480	10	37	452	28	12
460	464	470	472	472	475	473	472	469	465	21	00	475	10	03	447	28	13
465	465	469	474	474	473	475	478	475	469	23	00	478	9	45	458	20	14
467	469	472	476	476	477	483	483	481	471	21	48	484	9	30	460	24	15
471	467	470	471	474	474	474	474	476	473	1	50	485	11	35	465	20	16
465	468	471	474	475	477	481	479	477	472	22	00	481	16	02	465	16	17
471	469	474	475	479	480	481	483	482	472	23	00	483	10	15	465	18	18
479	472	474	473	473	(472)	(471)	(471)	(471)	474	0	00	482	9	35	470	12	19
468	466	466	467	467	471	475	476	479	...	..	..	...	..	..	...	..	20
473	472	474	474	475	473	476	474	484	475	24	00	484	11	40	467	17	21
478	481	485	485	489	488	485	485	485	481	3	40	494	9	48	465	29	22
488	488	488	489	487	485	485	485	488	485	4	45	490	9	41	468	22	23
487	489	490	489	486	486	483	483	482	484	3	30	491	11	00	471	20	24
478	483	488	486	486	485	485	485	483	481	18	00	488	12	00	469	19	25
474	479	482	483	483	483	481	478	477	478	4	35	484	13	00	466	18	26
474	479	483	485	486	485	485	484	483	476	20	00	486	13	35	465	21	27
473	481	482	482	484	484	484	482	481	477	20	20	485	12	05	464	21	28
473	477	480	483	485	485	485	484	483	478	21	45	486	13	45	466	20	29
469	475	479	482	483	483	484	484	483	477	23	20	485	14	34	467	18	30
471	475	478	480	483	483	485	483	483	474	21	50	486	13	25	459	27	31
472	473	475	475	476	476	476	476	476	472							20	
477	477	478	478	478	477	476	476	476	475							19	
478	480	482	481	482	481	479	479	479	477								

FEBRUARY, 1914.

34000_r PLUS TABULAR QUANTITIES.

466	469	471	474	477	479	481	481	481	474	0 00	483	15 00	466	17	1
478	477	478	478	478	481	483	485	485	475	23 33	486	10 00	464	22	2
473	473	477	480	483	481	485	483	483	477	22 27	486	13 00	464	22	3
485	484	483	484	485	482	482	485	485	480	1 00	488	14 23	466	22	4
475	479	483	483	483	484	484	483	483	480	0 08	487	16 00	475	12	5
478	483	481	479	479	479	479	482	480	480	2 00	487	13 48	472	15	6
479	477	475	479	479	479	484	482	483	477	2 08	486	12 25	462	24	7
481	484	488	490	489	487	487	486	486	480	19 00	490	12 20	462	28	8
477	481	483	484	483	481	480	479	479	481	4 00	491	13 00	472	19	9
470	472	476	478	479	477	476	474	473	473	5 00	480	12 00	460	20	10
467	473	476	481	482	480	478	478	476	471	20 00	482	14 00	458	24	11
467	471	477	482	485	485	485	483	482	475	20 03	486	13 30	458	28	12
475	480	484	486	488	489	488	486	484	480	21 25	489	13 00	466	23	13
478	475	481	484	483	484	483	479	482	478	20 51	485	13 45	469	16	14
473	476	482	484	487	492	493	495	494	483	23 00	495	16 05	472	23	15
486	487	492	495	496	499	502	505	502	491	22 20	506	16 17	483	23	16
493	491	494	493	495	499	503	506	508	497	23 30	510	14 25	485	25	17
488	494	495	496	496	496	499	499	498	497	2 00	511	15 55	488	23	18
485	486	485	483	484	486	486	487	488	486	1 00	499	10 00	476	23	19
485	485	489	490	491	489	489	491	490	484	20 00	491	9 08	473	18	20
478	479	484	483	483	481	481	482	484	482	3 00	493	14 00	469	24	21
494	496	501	501	501	506	503	501	499	494	20 25	507	13 45	481	26	22
484	490	492	492	492	489	489	489	489	487	0 00	499	14 30	473	26	23
488	491	496	498	497	496	497	494	493	490	19 00	498	14 02	479	19	24
478	482	487	491	489	488	489	486	483	484	3 20	493	12 15	470	23	25
493	490	495	497	499	496	496	493	493	493	20 00	499	0 00	483	16	26
495	487	492	495	496	496	496	495	493	493	15 15	499	9 58	485	14	27
480	480	484	496	501	502	500	497	494	489	2 40	502	14 50	479	23	28
480	482	485	487	488	488	488	488	488	483					21	
477	479	483	486	486	485	485	484	483	481					21	
472	475	479	481	487	485	485	484	484	478						

MARCH, 1914.

34000_r PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1	490	490	490	490	489	486	482	482	478	476	471	475	475	483	477
2	493	492	491	491	491	488	488	489	485	481	478	478	475	478	476
3	486	483	485	482	487	487	485	481	481	484	484	484	484	484	483
4	494	494	492	493	490	492	492	490	487	484	482	483	478	481	484
5†	(503)	(503)	(503)	(502)	(501)	(499)	(496)	490	490	490	487	488	488	490	495
6	502	508	508	508	507	498	496	500	495	495	493	491	495	503	507
7	509	508	513	510	507	505	503	501	498	497	493	489	490	492	500
8*	511	511	510	512	508	504	501	497	492	491	493	497	501	503	508
9	512	513	510	512	508	505	503	499	502	499	497	498	497	499	498
10*	510	509	511	510	509	507	506	499	496	496	500	501	504	505	502
11	503	503	506	509	507	505	505	504	497	493	497	498	498	500	503
12	505	504	505	508	511	507	506	501	493	487	488	489	494	494	502
13*	504	504	504	504	506	503	503	495	488	483	477	477	480	484	490
14	500	496	497	496	496	498	501	495	492	492	488	488	493	498	502
15	508	508	506	504	503	503	503	500	498	497	497	492	492	492	496
16	509	509	506	503	503	504	503	500	501	503	503	503	504	506	513
17	525	524	520	518	517	516	516	514	514	516	517	516	510	512	516
18	523	522	520	520	517	516	515	512	510	507	509	510	508	509	512
19	522	521	519	516	517	516	512	509	505	504	503	504	505	506	503
20*	508	508	509	505	504	500	499	496	496	496	494	496	496	502	504
21*	507	507	507	506	503	499	496	490	488	486	486	488	486	493	496
22*†	496	497	497	497	497	492	486	480	479	478	481	484	486	493	494
23*	500	503	502	501	498	496	491	486	486	481	480	479	484	492	494
24	498	499	498	498	496	494	492	486	481	482	479	481	485	490	491
25	504	502	502	503	504	501	496	493	492	486	483	483	483	486	485
26	499	502	502	501	501	502	496	494	495	495	492	493	498	501	502
27	497	503	500	501	501	501	494	492	491	489	487	488	491	491	491
28*†	492	491	492	492	491	492	489	480	474	471	471	475	481	486	493
29*†	492	491	491	491	490	491	487	480	479	481	479	479	484	490	492
30*†	494	493	494	494	492	492	491	485	479	479	475	480	482	487	491
31	498	498	497	497	496	496	493	492	489	486	485	490	492	494	493
Mean.....	503	503	503	502	502	500	498	494	491	490	489	490	491	494	497
Mean*.....	501	501	502	501	500	498	495	489	486	484	484	486	488	494	496
Mean†.....	495	495	495	495	494	493	490	483	480	480	479	481	484	489	493

APRIL, 1914.

34000_r PLUS TABULAR QUANTITIES.

1	503	503	503	501	499	497	498	492	496	490	491	493	489	499	499
2	510	509	506	503	501	501	498	495	496	494	494	491	491	491	496
3	509	508	507	505	505	502	495	491	492	493	494	495	503	507	507
4*	520	518	516	514	510	509	505	504	507	505	504	507	511	515	518
5	528	527	523	521	515	512	507	504	509	505	502	507	512	518	521
6	519	522	516	538	496	485	484	474	490	503	504	507	518	518	525
7	527	529	531	526	526	523	517	511	512	515	511	512	522	518	523
8	522	530	528	536	520	520	510	504	504	499	500	501	507	519	527
9	526	530	526	527	526	523	518	515	511	509	507	509	512	522	527
10	520	520	525	524	524	522	518	509	503	500	496	506	508	507	510
11	515	516	516	517	518	519	514	511	508	504	503	504	508	513	521
12†	519	519	518	523	524	523	520	517	515	513	512	508	513	519	524
13*	517	518	514	513	516	516	515	512	509	509	505	504	506	507	513
14*†	515	514	513	512	511	510	509	508	508	508	507	504	504	506	514
15†	518	515	514	515	513	513	510	508	512	510	506	507	510	513	513
16	515	517	509	510	508	505	498	502	504	509	504	513	517	519	518
17	518	518	517	515	511	509	505	507	509	508	509	511	513	515	513
18	523	523	524	520	519	517	513	509	512	513	515	516	518	522	523
19	524	519	522	521	521	519	512	507	505	506	511	513	516	522	522
20*	519	520	520	519	517	513	506	501	501	505	510	507	510	513	511
21*	511	512	514	514	510	509	502	503	499	501	500	498	499	502	505
22*	513	513	514	514	513	510	504	504	501	503	506	508	509	511	509
23	516	518	518	518	518	515	508	507	509	509	506	508	513	512	515
24*	514	515	515	517	517	514	508	497	497	497	493	495	497	506	510
25	509	511	511	513	512	512	512	507	498	493	492	495	500	505	509
26*†	(517)	(517)	(517)	(516)	(513)	(510)	(503)	(501)	498	496	496	501	510	515	518
27	517	518	517	517	516	518	516	513	508	504	503	499	500	502	509
28*	518	516	517	517	516	517	516	521	521	513	512	510	517	520	519
29*†	514	514	515	514	518	518	522	523	528	528	524	523	523	519	514
30	514	512	514	514	514	514	...	...	...	...	...	...	...	520	520
Mean.....	517	518	517	517	514	512	508	505	506	505	504	505	509	512	515
Mean*.....	516	516	516	515	514	513	509	507	507	506	506	506	509	511	513
Mean†.....	517	516	515	516	516	515	513	511	512	511	509	509	512	514	517

* Ten least disturbed days.

† Five international quiet days.

HOURLY VALUES OF VERTICAL INTENSITY.

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MARCH, 1914.

34000r PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
$\bar{r}$	$\bar{r}$	$\bar{r}$	$\bar{r}$	$\bar{r}$	$\bar{r}$	$\bar{r}$	$\bar{r}$	$\bar{r}$	$\bar{r}$	h	m	$\bar{r}$	h	m	$\bar{r}$	$\bar{r}$	
479	480	487	487	489	484	490	494	494	484	0	15	495	11	00	471	24	1
479	483	489	490	494	490	495	496	490	487	22	30	496	15	42	474	22	2
483	487	492	494	494	494	494	491	494	487	21	00	494	7	15	481	13	3
489	491	495	502	502	502	503	502	503	492	21	50	505	13	37	475	30	4
497	500	502	502	505	506	506	506	505	498	21	40	507	11	30	485	22	5
512	514	501	514	515	514	515	515	518	505	24	00	518	11	40	489	29	6
507	511	510	505	508	509	509	508	512	504	0	10	519	13	35	489	30	7
507	511	513	512	513	512	512	513	511	506	3	58	515	10	32	490	25	8
502	508	511	510	507	508	506	510	510	505	2	15	513	7	45	496	17	9
505	508	508	512	511	509	506	505	502	505	3	30	512	8	42	494	18	10
500	502	506	510	510	510	507	507	509	504	18	25	510	10	00	493	17	11
507	507	509	512	513	512	509	507	505	503	20	00	513	10	00	487	26	12
495	499	504	507	509	508	507	505	503	497	20	40	509	11	15	477	32	13
504	508	511	514	516	515	514	510	511	501	20	21	517	12	00	488	29	14
510	510	510	511	511	517	520	519	513	505	22	05	522	14	33	490	32	15
516	521	521	524	526	528	528	528	527	512	22	00	528	8	00	500	28	16
522	508	517	516	524	522	523	528	526	518	22	28	529	17	19	506	23	17
516	516	517	518	520	521	522	521	523	516	0	00	526	10	13	505	21	18
501	505	506	506	506	507	507	509	509	509	0	25	524	16	04	501	23	19
503	503	509	509	509	508	509	509	509	503	2	37	511	8	24	493	18	20
495	496	498	498	498	496	497	497	498	496	0	00	509	9	48	485	24	21
495	502	502	502	503	500	500	500	501	493	16	15	504	9	09	478	26	22
497	500	503	506	504	503	501	499	499	495	19	00	506	12	06	478	28	23
493	491	491	495	497	500	498	505	502	493	23	08	505	11	00	479	26	24
491	499	505	504	504	505	501	499	496	496	18	00	505	12	27	482	23	25
504	505	511	511	511	508	505	503	498	501	19	18	513	11	00	492	21	26
494	495	497	500	500	499	497	495	494	495	2	00	503	11	00	487	16	27
496	498	501	501	502	501	498	498	495	490	19	45	502	10	00	471	31	28
493	496	496	498	500	500	499	498	497	491	21	00	500	11	30	479	21	29
494	496	497	501	504	504	503	502	499	492	21	00	504	11	10	474	30	30
494	499	504	505	508	509	508	505	505	497	21	20	510	10	30	485	25	31
499	502	504	506	507	506	506	506	505	499							24	
498	501	503	505	505	504	503	503	501	497							25	
495	498	500	501	500	500	499	498	497	492								

APRIL, 1914.

34000r PLUS TABULAR QUANTITIES.

503	507	508	509	513	514	515	514	512	502	22	00	515	12	37	489	26	1
496	499	502	506	508	510	511	511	513	501	24	00	513	11	39	487	26	2
512	512	515	515	517	517	519	518	521	507	24	00	521	8	07	486	35	3
518	520	521	518	522	524	527	528	529	515	24	00	529	7	35	501	28	4
518	520	518	518	516	517	519	517	518	516	0	46	529	10	54	501	28	5
533	533	525	526	520	539	538	521	527	515	4	15	542	6	30	469	73	6
527	528	527	521	526	525	526	513	511	521	3	15	532	24	00	511	21	7
527	531	526	530	530	532	526	526	526	520	4	00	536	12	14	497	39	8
524	530	531	532	530	529	526	524	525	522	19	34	534	11	12	506	28	9
518	519	524	525	526	525	522	519	519	516	20	00	526	10	54	495	31	10
523	(528)	533	535	533	534	529	526	521	519	18	56	536	11	42	502	34	11
524	528	528	529	530	529	528	524	522	521	20	00	530	12	00	508	22	12
516	519	520	522	522	524	523	521	519	515	19	36	524	13	36	503	21	13
513	512	513	516	520	523	524	522	521	513	22	03	524	13	36	504	20	14
514	510	512	515	517	516	513	511	512	512	0	00	521	11	00	506	15	15
518	515	519	519	516	521	523	524	524	514	23	26	525	7	15	496	29	16
516	516	517	518	521	524	524	526	525	515	23	12	527	7	18	504	23	17
523	526	525	525	525	520	513	523	517	519	22	47	527	22	18	509	18	18
519	519	526	524	524	523	521	521	521	518	0	55	526	8	21	504	22	19
509	512	517	516	515	514	513	512	513	512	0	32	524	8	15	500	24	20
506	509	509	511	512	512	512	514	515	507	3	30	516	13	12	497	19	21
512	514	518	519	518	519	518	517	517	512	18	36	520	9	00	501	19	22
515	516	519	520	520	518	517	515	515	514	18	40	521	7	50	506	15	23
515	516	516	517	517	517	515	517	513	510	4	00	517	11	06	492	25	24
512	516	524	525	524	521	520	518	(518)	511	17	31	526	10	15	492	34	25
517	519	520	525	526	522	524	522	520	513	20	00	526	10	33	495	31	26
513	515	516	519	523	524	522	523	520	514	21	24	525	11	54	498	27	27
522	(522)	521	518	521	520	520	521	519	518	8	21	523	11	30	509	14	28
514	509	510	516	517	518	517	517	513	518	9	24	528	16	26	505	23	29
516	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	30
516	518	519	520	521	522	521	519	519	515							27	
514	515	516	518	519	519	519	519	518	513							22	
516	516	517	520	524	524	523	522	520	516								

MAY, 1914.

34000r PLUS TABULAR QUANTITIES.

Day	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h
1	514	514	515	515	516	520	519	520	515	515	514	505	517	519	517
2	512	517	518	516	513	512	509	510	518	518	518	519	511	518	518
3*	521	519	518	518	518	517	514	512	513	510	508	507	503	507	509
4*	523	523	523	521	518	516	513	514	517	517	517	517	522	520	519
5	517	518	519	517	516	515	507	508	507	510	513	514	521	521	521
6	519	520	520	520	522	518	510	508	508	516	519	525	521	523	529
7	517	522	528	526	525	521	524	522	523	526	529	528	529	532	530
8	516	518	519	519	523	520	518	518	514	515	514	514	516	517	520
9*†	513	515	517	519	520	523	519	517	516	520	514	523	519	519	520
10*†	516	516	519	523	524	527	527	517	512	509	508	511	517	521	519
11	511	512	514	517	519	518	517	513	514	512	512	515	518	518	516
12	514	514	515	517	520	522	525	522	518	513	512	522	525	525	525
13*	520	518	518	518	519	523	529	526	(524)	521	518	516	513	517	522
14*†	518	517	516	516	519	520	522	523	528	530	529	524	524	522	523
15	521	521	518	516	518	515	513	517	521	522	526	526	524	528	534
16	526	516	518	516	518	516	516	522	524	524	527	532	534	534	531
17	522	526	529	536	516	522	522	521	526	526	527	528	531	530	527
18	522	522	521	522	522	521	521	520	520	519	522	527	530	528	529
19†	(523)	(523)	(523)	(523)	(523)	(523)	(523)	523	524	529	530	532	537	540	531
20*†	522	524	525	526	526	524	518	513	511	513	520	527	532	532	532
21	526	528	529	529	530	528	521	517	520	519	524	531	533	533	531
22*	524	527	526	527	527	525	518	508	506	508	511	517	521	523	528
23*	521	521	523	526	526	516	525	520	515	513	516	517	525	530	534
24	530	526	532	531	530	530	524	520	521	523	524	526	524	534	534
25	523	523	523	524	525	527	523	516	521	524	527	531	526	532	532
26	523	522	522	521	523	523	526	519	521	522	529	527	528	531	523
27	517	519	523	523	524	522	522	524	524	530	535	535	533	530	530
28	525	522	523	524	527	527	526	530	531	534	535	530	529	533	531
29	529	528	525	525	529	529	528	524	525	525	526	529	530	526	529
30*	530	526	524	523	524	526	525	523	521	521	530	533	538	538	539
31	530	530	529	528	524	521	519	516	518	520	518	518	517	520	528
Mean.....	521	521	522	522	522	522	520	518	519	519	521	523	524	526	526
Mean*.....	521	521	521	522	522	522	521	517	516	516	517	519	521	523	524
Mean†.....	518	519	520	521	522	523	522	519	518	520	520	523	526	527	525

JUNE, 1914.

34000r PLUS TABULAR QUANTITIES.

1	544	544	538	533	536	531	529	527	531	526	533	535	544	544	543
2	536	536	533	532	531	530	526	520	518	522	527	530	534	535	539
3	541	534	537	534	538	533	531	532	536	540	546	549	548	548	549
4	534	536	536	537	536	528	527	533	536	538	535	530	546	547	543
5	536	534	535	539	536	535	528	521	520	520	526	535	541	544	545
6	537	538	537	538	539	536	532	523	518	519	517	512	518	525	531
7	526	530	533	531	531	532	529	526	527	531	533	527	543	547	543
8	525	522	526	527	527	527	521	522	523	523	524	526	529	529	531
9*	530	529	530	530	531	531	533	533	537	532	538	530	530	534	532
10	530	529	530	530	531	531	533	533	537	532	538	530	530	534	532
11*	543	541	541	540	541	540	540	540	540	536	536	535	532	530	532
12*†	540	533	534	533	533	534	533	533	537	532	531	538	532	539	534
13*†	533	532	532	533	534	537	532	530	530	537	536	533	532	534	537
14	537	535	532	531	530	529	525	526	530	530	530	537	538	538	533
15*	534	535	534	535	534	533	531	530	535	535	543	547	545	544	539
16*†	536	538	537	537	537	538	538	540	539	545	552	558	558	554	547
17*†	535	535	534	531	531	525	516	517	518	522	526	528	528	529	536
18	535	535	534	534	532	531	528	528	530	532	536	536	542	543	549
19	533	533	538	539	538	537	534	534	528	527	529	535	536	539	545
20	536	535	532	534	536	535	534	532	537	542	547	553	553	548	543
21*	536	537	540	541	542	542	535	528	518	514	515	521	534	541	545
22*	538	540	541	541	542	544	540	536	535	539	541	543	550	555	551
23*†	540	540	540	542	544	544	538	536	536	536	536	536	537	549	549
24	538	537	537	538	539	539	535	531	530	535	537	538	537	539	540
25	544	538	537	546	547	548	548	549	540	528	537	532	534	533	532
26	537	537	535	537	540	539	537	534	536	543	545	543	538	539	538
27	544	547	538	537	538	538	539	533	531	533	538	538	541	542	545
28	553	549	549	550	550	549	543	547	545	551	553	554	550	550	553
29	553	553	552	550	549	549	542	542	548	550	551	551	552	558	552
30	558	555	548	548	549	548	545	544	543	542	543	542	545	547	544
Mean.....	538	538	537	537	538	537	533	532	532	533	536	537	539	541	541
Mean*.....	536	535	536	536	536	536	532	531	531	532	534	536	538	541	541
Mean†.....	537	536	535	535	536	536	531	531	532	534	536	539	537	541	541

* Ten least disturbed days.

† Five international quiet days.

MAY, 1914.

34000 γ PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	h	m	γ	h	m	γ	r	
513	508	506	509	510	512	511	510	514	514	6	00	520	11	35	499	21	1
517	513	514	517	516	517	518	523	519	516	23	00	523	7	00	509	14	2
513	518	518	521	519	521	522	524	524	516	23	00	524	13	00	503	21	3
518	521	519	516	515	515	515	516	517	518	0	00	524	7	33	511	13	4
520	518	515	513	513	513	513	514	518	515	13	10	521	7	39	506	15	5
535	527	522	518	517	515	510	510	513	519	16	00	535	7	37	508	27	6
530	521	519	519	517	514	512	511	513	522	14	00	532	23	00	511	21	7
520	521	521	523	521	516	514	513	512	518	5	00	523	24	00	512	11	8
520	519	520	521	520	518	516	515	515	518	12	00	523	0	00	512	11	9
519	514	515	519	517	518	515	513	512	517	6	00	527	11	00	508	19	10
518	516	521	523	523	522	520	518	515	517	18	54	524	1	00	511	13	11
526	521	524	526	525	525	525	523	520	521	19	00	526	10	44	508	18	12
(520)	(517)	515	522	523	524	523	520	520	520	7	12	529	13	00	513	16	13
523	518	519	521	523	525	523	522	521	522	9	44	531	3	00	516	15	14
531	(524)	517	515	509	520	524	525	524	521	15	00	534	20	10	507	27	15
532	524	521	521	520	520	521	525	526	524	13	22	535	6	30	514	21	16
528	522	519	521	517	515	518	525	524	524	4	00	536	20	13	514	22	17
527	526	526	525	524	522	523	(523)	(523)	524	13	00	530	9	30	517	13	18
527	524	521	521	520	522	521	521	522	525	14	00	540	20	00	520	20	19
528	528	528	526	525	524	524	524	524	524	13	27	533	9	30	510	23	20
531	530	530	530	529	528	527	524	526	527	12	24	534	7	51	516	18	21
528	526	527	523	521	520	520	519	519	521	15	00	528	8	49	504	24	22
532	533	538	533	533	530	527	527	527	525	18	00	538	10	00	513	25	23
535	533	533	534	533	531	529	526	525	529	14	37	537	8	00	520	17	24
521	529	529	526	528	529	527	525	524	526	14	05	532	7	45	515	17	25
529	529	527	532	529	528	526	523	519	525	19	00	532	7	32	515	17	26
528	529	531	532	532	531	531	530	526	528	11	00	535	0	25	517	18	27
534	531	531	531	531	532	532	532	529	530	11	19	535	2	00	522	13	28
530	530	532	532	533	533	532	533	532	529	20	00	533	8	17	523	10	29
536	536	536	533	533	534	533	533	532	530	14	16	542	9	00	521	21	30
531	527	523	520	508	513	521	547	548	524	23	36	550	21	41	491	59	31
526	524	523	523	522	522	522	522	522	522							19	
524	523	524	524	523	523	522	521	521	521							19	
523	521	521	522	522	520	519	518	518	521								

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539	536	536	528	532	533	535	536	536	535	0	00	548	10	00	526	22	1
536	535	536	535	535	534	531	541	533	532	23	10	542	8	09	517	25	2
547	542	540	538	534	530	529	529	534	538	12	00	549	22	00	529	20	3
540	539	(538)	(537)	(535)	(533)	(531)	530	533	536	13	37	549	7	00	527	22	4
540	541	540	540	531	531	531	534	534	534	15	00	545	8	16	518	27	5
539	542	541	541	537	535	532	532	(532)	531	17	00	542	12	00	512	30	6
548	545	545	543	541	537	535	529	529	...	16	00	548	...	...	...	...	7
531	(531)	531	530	531	531	529	527	527	529	11	00	533	12	26	521	12	8
537	537	540	540	540	539	537	537	532	530	18	27	543	7	45	520	23	9
536	537	540	540	544	544	541	541	548	535	24	00	548	2	00	529	19	10
526	531	534	538	540	540	540	540	539	537	0	00	548	16	00	526	22	11
533	532	532	534	537	537	539	537	537	535	1	00	540	10	34	526	14	12
540	537	537	538	538	538	539	539	538	535	16	00	540	8	28	527	13	13
532	535	534	535	533	532	530	536	527	532	10	30	539	7	54	524	15	14
536	537	537	537	537	536	534	535	536	537	12	00	547	0	00	527	20	15
539	538	539	537	538	537	537	537	537	541	12	42	560	0	00	536	24	16
535	534	534	535	531	530	530	530	531	529	15	21	537	7	12	515	22	17
547	543	540	537	535	535	535	533	536	536	14	52	549	7	36	526	23	18
538	537	535	531	535	537	531	533	533	535	16	22	551	10	00	527	24	19
542	542	541	539	539	537	535	535	534	539	13	31	554	0	30	530	24	20
547	542	537	536	537	536	533	537	537	535	16	00	547	10	00	514	33	21
551	547	546	545	544	541	540	540	539	543	14	00	555	9	37	534	21	22
551	545	545	546	543	540	537	536	537	541	16	00	551	23	00	536	15	23
540	540	540	542	543	543	546	543	543	539	21	45	549	8	42	529	20	24
532	536	538	537	539	541	541	541	538	539	6	12	549	10	21	523	26	25
539	539	530	529	531	535	536	545	545	538	0	42	545	18	29	525	20	26
549	549	547	549	551	546	546	542	547	542	20	08	558	9	10	530	23	27
552	553	552	553	553	553	555	558	554	551	23	30	563	7	00	543	20	28
552	553	553	553	553	554	558	557	552	551	13	54	559	7	03	539	20	29
545	546	541	540	538	541	542	544	(544)	545	0	50	558	20	00	538	20	30
540	540	539	539	538	538	537	537	538	537							22	
540	538	538	538	538	537	537	537	536	536							21	
540	537	537	538	539	538	538	538	538	537								

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Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1	552	552	553	547	545	542	539	539	547	551	552	553	549	554	553
2*	549	549	549	548	547	547	537	532	540	544	546	544	552	551	552
3*	549	550	551	549	550	548	542	539	540	548	555	559	552	554	556
4	538	528	552	551	547	547	544	532	531	531	531	537	546	548	556
5	541	545	546	545	547	549	544	543	542	542	542	539	540	546	552
6	544	544	546	548	553	550	544	544	540	544	544	550	551	553	560
7	544	545	545	549	551	549	545	534	530	531	533	542	550	552	553
8*	545	544	546	551	551	550	543	535	533	542	542	544	545	544	546
9	552	547	547	550	550	549	548	549	557	561	558	559	550	547	547
10	549	545	543	547	547	547	542	539	542	545	547	542	543	540	544
11*	550	547	544	543	544	545	544	547	553	557	553	555	554	553	555
12*	548	541	538	538	540	540	539	539	539	547	548	547	550	554	551
13*	547	545	544	544	544	544	543	540	545	548	548	548	547	550	549
14*	548	549	548	548	546	543	535	537	546	547	547	548	548	549	549
15*	550	548	546	546	547	544	543	545	548	554	550	552	554	553	550
16	547	548	546	544	546	542	540	541	543	543	545	538	537	541	549
17*	550	550	549	548	546	546	544	544	538	541	544	549	556	558	550
18	547	547	547	547	548	544	533	526	534	540	544	544	546	544	546
19†	540	544	545	546	546	543	534	530	533	538	539	542	544	545	545
20*	543	543	547	547	549	549	542	533	537	538	542	543	550	551	551
21	549	549	549	551	549	548	543	537	541	542	541	547	556	554	558
22	548	549	549	549	550	549	546	546	547	545	547	540	539	555	549
23	542	541	544	544	546	545	549	551	552	554	544	550	557	555	556
24	539	546	538	543	543	545	544	540	544	545	545	549	547	545	551
25	538	539	541	544	542	540	537	535	539	546	545	544	550	546	547
26	540	539	541	537	539	541	538	528	533	532	545	546	546	547	546
27	541	540	540	540	541	540	540	539	537	532	546	551	552	544	539
28	547	547	546	543	541	541	539	534	537	542	538	539	544	545	550
29	550	549	549	549	551	538	535	544	539	540	544	540	544	544	547
30	549	550	544	539	539	539	535	535	540	549	543	537	548	551	556
31	546	545	546	546	546	545	541	539	541	544	545	546	548	549	550
Mean.....	547	546	546	545	546	544	540	538	542	545	546	546	547	549	550
Mean*.....	548	547	546	545	546	543	539	536	539	542	544	545	546	549	550
Mean†.....	548	547	546	545	546	543	539	536	539	542	544	545	546	549	550

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1	543	550	550	545	546	547	537	537	540	538	542	544	544	543	556
2	550	552	562	548	545	542	537	531	534	540	540	549	552	543	552
3	548	551	557	557	544	536	542	536	532	534	551	538	540	546	544
4	537	535	541	544	544	544	531	531	535	538	532	534	535	537	544
5	537	535	541	544	544	544	543	543	543	546	542	542	543	542	548
6	548	551	547	550	550	549	544	533	538	538	541	532	536	538	545
7	539	543	539	544	543	544	538	538	534	531	535	538	541	547	548
8	544	544	544	543	544	546	541	536	542	547	547	542	538	543	540
9*	541	540	539	539	538	538	531	524	523	526	529	531	536	536	541
10*	539	538	540	535	534	534	535	534	535	541	545	546	546	544	541
11	541	540	538	538	536	537	534	530	529	527	530	534	541	542	539
12*	540	539	539	533	529	533	532	528	532	525	527	533	531	528	532
13*	539	537	537	537	537	535	532	530	529	537	540	541	544	547	550
14*	543	545	542	543	542	541	539	534	539	540	544	545	542	542	546
15*	542	543	543	542	542	540	534	528	531	541	544	545	542	541	542
16*	538	542	541	541	541	540	533	535	535	539	538	540	539	539	539
17	539	538	538	538	538	535	531	524	519	511	502	509	518	519	522
18	533	538	539	541	541	537	530	528	528	527	529	532	534	542	542
19	537	543	546	547	543	540	535	527	526	533	535	540	540	543	539
20	541	542	543	543	544	545	537	537	540	543	542	545	547	551	551
21*	541	539	543	536	543	542	535	533	540	546	546	547	547	546	542
22†	545	532	534	542	538	544	536	531	542	546	543	535	535	533	536
23	539	543	542	541	542	541	535	532	539	546	540	533	533	538	534
24	537	541	542	544	544	544	540	531	535	540	539	538	535	534	536
25	545	545	545	544	543	546	541	545	542	541	545	545	548	551	546
26*	548	551	546	546	546	545	540	540	540	543	549	551	553	558	554
27*	557	558	555	553	551	550	542	537	540	540	543	546	546	548	551
28	553	554	562	554	553	557	549	549	543	542	545	550	551	556	558
29	560	559	561	561	562	553	546	544	545	551	557	560	564	566	567
30	559	567	559	558	562	555	550	542	540	541	543	550	554	559	557
31	544	545	545	544	544	543	538	535	536	538	539	541	543	544	545
Mean.....	542	543	542	541	540	541	536	533	535	537	540	541	542	544	544
Mean*.....	541	541	541	539	541	540	535	530	533	539	541	541	541	543	543
Mean†.....	541	541	541	539	541	540	535	530	533	539	541	541	541	543	543

* Ten least disturbed days.

† Five international quiet days.

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16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum		Minimum		Range	Day
<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>
...	549	546	546	545	547	547	549	551	...	...	...	...	...	...	1
552	552	550	547	545	544	545	547	550	548	14	00	554	7	00	2
551	550	550	550	549	549	548	545	548	547	12	49	552	8	00	3
557	550	548	548	544	541	549	542	542	548	12	00	559	23	35	4
550	546	547	547	542	540	539	541	542	542	14	54	557	0	28	5
551	550	548	545	545	545	539	544	546	545	15	29	555	12	22	6
556	553	550	553	551	550	549	545	545	549	15	00	560	9	00	7
554	547	549	553	553	552	548	546	545	546	16	00	554	9	00	8
550	548	547	549	548	556	548	552	553	546	21	00	556	9	00	9
547	547	546	548	550	550	551	550	549	550	11	39	562	2	23	10
545	543	544	549	551	(550)	(549)	548	549	545	20	00	551	8	00	11
550	547	547	549	548	547	548	548	548	549	10	00	557	4	00	12
552	548	548	548	548	549	549	548	549	546	14	02	554	3	35	13
549	549	548	548	548	546	545	547	548	546	14	35	553	7	35	14
549	547	546	546	545	544	544	547	549	546	15	11	551	7	17	15
549	550	550	546	544	544	545	546	546	548	13	00	554	6	30	16
549	549	547	546	544	546	545	548	549	545	16	42	554	12	40	17
546	548	546	547	545	544	545	546	545	547	13	48	561	9	07	18
544	544	545	544	541	540	540	537	536	542	5	00	548	7	54	19
550	549	548	549	548	543	541	537	542	543	18	53	553	7	30	20
552	548	545	545	546	546	545	550	550	546	19	09	554	8	14	21
560	553	557	557	557	552	552	554	550	550	16	00	560	8	00	22
557	555	550	553	553	550	549	548	547	549	16	00	557	12	26	23
557	551	550	554	547	549	547	546	544	549	13	00	557	2	00	24
546	547	546	549	547	551	547	534	546	545	1	42	553	20	06	25
549	545	545	548	548	549	548	543	541	544	13	00	550	8	00	26
543	542	542	542	547	546	547	548	544	542	23	02	549	7	45	27
538	543	540	544	548	549	549	549	552	543	13	00	552	10	00	28
544	551	537	544	539	539	551	557	552	544	15	15	563	7	31	29
540	537	537	545	543	544	550	549	541	544	4	30	556	7	24	30
550	550	550	548	546	547	548	545	546	545	14	42	557	7	19	31
550	548	547	548	547	547	547	546	546	546						21
550	548	548	548	548	547	546	546	548	546						18
550	548	548	548	548	547	546	547	547	546						

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550	551	549	551	546	546	543	546	550	546	15	00	556	7	15	536	20	1
551	551	554	551	552	548	547	548	547	547	3	07	562	7	45	529	33	2
540	546	551	550	545	545	540	547	(547)	544	3	03	560	10	52	526	34	3
542	540	540	544	542	540	539	538	540	...	...	...	...	...	...	...	...	...
549	544	544	545	545	540	540	538	536	542	14	51	549	2	00	535	14	5
541	545	552	551	549	550	546	546	551	...	18	28	552	12	15	530	22	6
546	550	553	553	549	546	544	544	542	548	12	00	554	24	00	542	12	7
545	545	(545)	(546)	(546)	(546)	(546)	547	548	542	15	00	548	9	23	530	18	8
540	540	540	542	546	544	542	543	543	543	10	11	548	7	43	536	12	9
533	536	538	543	543	544	543	543	543	537	21	00	544	9	00	523	21	10
536	538	539	542	541	545	545	545	543	540	12	19	546	7	45	533	13	11
538	537	538	536	538	538	541	541	540	537	13	37	544	10	00	527	17	12
531	533	533	531	533	538	538	539	540	533	3	19	540	9	48	525	15	13
546	549	549	549	548	544	545	544	544	541	15	05	552	8	23	528	24	14
542	540	541	539	539	538	543	543	544	542	11	39	546	8	00	534	12	15
541	537	537	535	536	537	536	536	536	539	11	44	545	8	00	528	17	16
540	538	534	535	532	528	530	534	539	537	15	37	549	21	18	527	22	17
525	532	532	531	532	527	529	536	532	527	0	00	539	11	00	502	37	18
545	540	538	540	540	536	534	544	540	537	23	22	549	8	12	523	26	19
536	543	546	544	543	541	543	539	543	540	4	20	552	9	06	525	27	20
549	547	542	547	545	542	541	541	542	544	14	39	554	7	20	536	18	21
542	543	550	550	546	544	542	543	539	543	18	20	551	7	30	532	19	22
537	538	544	546	548	548	547	543	541	540	5	51	549	7	10	526	23	23
534	540	546	548	550	549	549	549	543	541	18	40	552	7	46	532	20	24
533	533	537	535	542	546	549	549	545	540	22	25	551	7	58	529	22	25
543	549	547	549	549	548	553	554	553	547	23	25	555	7	24	538	17	26
533	550	548	550	550	550	552	556	554	549	14	00	558	7	06	538	20	27
551	547	544	550	545	541	557	551	552	548	22	15	563	7	55	535	28	28
556	551	551	554	557	555	555	555	559	553	0	27	564	9	54	541	23	29
560	565	560	560	558	556	556	558	558	558	14	13	570	8	10	542	28	30
556	554	554	555	551	550	550	550	552	553	4	39	567	9	00	540	27	31
543	544	544	545	545	543	544	545	545	543							21	
542	542	541	542	543	542	543	544	544	541							17	
540	541	543	544	542	542	542	543	543	540								

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34000_r PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1	557	557	556	561	555	554	548	543	542	541	546	555	558	556	555
2*	551	553	555	557	557	553	539	542	543	541	540	540	544	549	551
3*	554	555	555	556	558	556	547	549	553	554	554	556	561	565	563
4	554	557	556	557	561	560	547	538	528	535	541	548	548	550	550
5	559	558	559	560	563	563	551	538	537	548	556	556	551	550	551
6	557	558	564	558	561	562	554	552	552	554	556	554	556	556	551
7*	560	558	558	560	562	564	557	556	550	551	555	557	556	560	560
8	563	561	560	560	562	563	553	548	551	547	552	555	558	558	558
9	554	560	564	563	566	564	559	559	554	547	556	562	565	564	563
10	564	562	563	561	563	562	552	550	548	554	549	556	557	557	557
11	567	563	564	563	565	562	555	550	549	549	554	559	568	565	565
12	565	565	564	565	561	564	555	552	556	551	557	559	565	566	565
13*	570	569	568	568	568	565	560	560	562	561	560	561	561	562	562
14*	567	569	568	569	567	565	555	551	546	548	550	550	556	555	556
15*	563	568	563	561	561	559	550	558	560	565	566	567	565	564	562
16	567	569	571	571	572	563	552	547	545	545	548	551	557	561	566
17	565	569	569	569	568	567	564	565	565	565	567	567	571	569	567
18	560	563	564	574	574	570	554	556	555	561	561	(562)	(565)	(568)	(570)
19	569	570	577	576	576	576	566	559	560	564	567	567	568	563	566
20*	565	568	569	571	574	573	560	554	554	556	553	555	553	556	561
21*	566	567	571	574	573	574	564	560	562	563	563	561	560	563	565
22*	566	566	567	566	569	570	569	569	567	565	567	562	563	561	562
23	567	566	560	565	570	567	557	557	554	557	557	558	558	554	560
24	576	573	571	570	573	571	563	564	562	565	563	563	562	563	560
25	574	573	572	572	566	569	564	564	565	565	570	567	566	568	566
26*	574	572	571	571	570	568	567	567	569	566	564	562	565	562	561
27	572	574	568	565	569	569	562	557	556	556	554	550	563	573	576
28	595	595	593	590	588	586	581	585	580	579	578	579	578	579	581
29	568	579	581	585	585	584	578	575	569	570	571	571	577	580	581
30	581	581	585	584	585	581	573	571	573	570	567	569	570	566	566
Mean.....	566	567	567	567	568	567	559	557	556	556	558	559	562	562	563
Mean*.....	564	564	564	565	566	565	557	557	557	557	557	557	558	560	560
Mean†.....	564	564	565	566	566	565	556	555	554	554	554	554	556	558	559

OCTOBER, 1914.

34000_r PLUS TABULAR QUANTITIES.

1	584	586	586	591	586	584	576	570	566	562	570	573	568	565	569
2	575	578	583	584	585	584	576	566	563	568	567	564	566	564	571
3	573	578	577	578	577	569	569	562	561	559	561	560	561	563	572
4	574	573	578	582	583	582	574	570	564	562	564	565	567	572	580
5*	573	574	575	578	577	575	570	569	563	562	569	571	575	572	573
6	574	572	573	576	575	576	574	568	563	561	559	567	574	575	568
7	570	569	572	573	575	573	568	566	558	554	553	560	560	560	561
8	574	574	573	573	571	571	565	558	552	550	551	550	556	559	564
9	573	574	571	576	570	572	574	567	560	556	556	553	555	562	567
10	576	574	575	571	575	574	576	576	571	570	568	570	571	570	576
11*	581	581	580	579	575	575	575	572	564	564	565	564	566	571	572
12*	579	578	578	578	573	572	567	559	563	565	565	567	572	576	579
13*	582	579	579	578	576	579	574	566	566	566	572	572	568	567	568
14*	580	580	579	578	573	572	567	563	558	557	562	569	572	568	574
15	578	578	577	577	574	570	562	551	542	542	547	554	557	563	565
16	577	579	583	585	578	577	571	564	562	565	565	569	571	572	577
17	577	579	581	579	577	579	572	561	562	568	569	569	568	569	574
18	576	575	575	580	581	579	573	562	559	560	561	566	566	568	573
19	570	575	580	580	581	581	576	569	565	563	565	565	566	565	565
20	568	568	569	573	573	575	569	562	557	557	553	554	555	556	557
21	...	...	...	...	...	...	...	559	561	555	553	554	561	563	563
22	572	572	572	571	571	573	572	567	565	567	565	564	565	566	568
23*	575	573	571	572	573	575	574	569	562	562	562	563	564	564	563
24*	573	573	572	567	571	570	568	571	566	566	563	564	565	566	566
25*	567	569	567	567	565	565	564	561	556	558	562	562	561	562	560
26*	571	569	569	567	566	564	557	553	551	552	554	556	557	560	560
27	570	570	570	570	567	562	561	561	562	571	572	579	569	568	563
28	576	563	575	580	584	582	580	574	565	563	572	577	569	571	572
29	561	586	584	585	588	584	575	572	579	580	579	579	569	575	583
30	581	588	584	584	584	582	579	579	566	566	568	569	569	570	570
31*	572	575	577	575	575	574	570	566	560	564	564	566	566	567	567
Mean.....	574	575	576	577	576	575	571	566	562	562	563	565	566	567	569
Mean*.....	575	575	575	574	572	572	569	565	561	562	564	563	567	567	568
Mean†.....	574	574	573	571	570	569	565	561	559	560	561	564	565	566	568

* Ten least disturbed days.

† Five international quiet days.

HOURLY VALUES OF VERTICAL INTENSITY.

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SEPTEMBER, 1914.

34000r PLUS TABULAR QUANTITIES.

16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean	Maximum			Minimum			Range	Day
<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>h</i>	<i>m</i>	<i>r</i>	<i>r</i>	
555	555	556	555	553	551	551	551	551	553	4	00	561	10	00	541	20	1
551	555	556	555	554	554	551	552	553	550	4	27	557	7	21	538	19	2
560	559	558	558	558	557	555	551	553	556	14	31	568	7	30	547	21	3
551	558	563	564	559	557	558	558	557	552	19	08	565	8	35	527	38	4
553	558	564	564	562	560	560	560	558	556	5	39	564	8	27	536	28	5
552	557	558	564	563	562	560	558	558	557	2	40	565	9	28	549	16	6
559	560	566	568	568	568	567	563	563	560	19	00	568	9	24	550	18	7
556	558	559	558	560	562	562	560	566	558	24	00	566	8	09	546	20	8
564	559	565	565	565	565	561	566	566	562	5	30	571	9	27	545	26	9
560	564	566	566	566	565	567	566	566	560	22	09	567	8	25	545	22	10
563	564	565	567	567	566	566	569	567	562	23	00	569	10	00	549	20	11
563	568	567	566	568	566	564	568	568	563	20	00	568	7	18	551	17	12
559	561	559	565	565	564	565	566	567	564	1	00	570	13	28	556	14	13
557	559	558	555	557	559	559	558	561	558	4	30	570	8	43	543	27	14
565	567	565	560	559	559	560	561	565	562	1	50	569	7	21	548	21	15
566	565	565	564	564	563	561	562	564	561	4	38	576	9	30	544	32	16
565	575	572	572	569	565	563	565	560	567	17	00	575	24	00	560	15	17
(573)	576	569	571	570	569	568	567	565	566	17	00	576	7	00	554	22	18
573	576	576	575	572	567	565	567	564	569	5	36	577	8	00	559	18	19
565	569	572	572	571	567	567	567	567	564	5	43	575	11	33	551	24	20
567	570	572	572	572	572	570	567	566	567	5	40	576	8	00	560	16	21
566	569	572	567	566	564	568	564	562	566	18	32	573	23	40	559	14	22
563	569	569	572	570	576	574	576	576	565	24	00	576	14	14	553	23	23
560	565	566	568	570	572	573	574	573	568	1	00	576	16	00	560	16	24
565	566	569	570	570	572	574	573	574	569	1	19	578	8	24	563	15	25
562	563	564	565	564	566	567	569	571	567	0	57	576	15	00	561	15	26
572	579	581	583	589	595	602	595	596	573	22	00	602	12	09	545	57	27
580	581	581	568	568	570	574	574	578	581	0	00	596	19	11	565	31	28
583	585	586	582	580	575	576	577	581	578	18	00	586	1	00	568	18	29
566	577	576	581	580	574	567	568	574	574	5	00	585	14	15	564	21	30
563	566	567	567	567	566	566	566	566	564							22	
561	563	564	564	563	563	563	562	563	561							19	
559	561	563	563	564	563	563	563	563	560								

OCTOBER, 1914.

34000r PLUS TABULAR QUANTITIES.

572	577	578	573	564	571	570	566	568	574	4	00	591	9	54	560	31	1
574	576	579	578	576	572	571	577	569	574	5	00	585	8	40	563	22	2
584	579	582	584	581	580	578	577	577	573	16	00	584	13	36	557	27	3
577	578	580	586	582	579	579	579	573	575	19	00	586	10	00	562	24	4
573	572	575	580	580	581	580	579	574	574	21	00	581	10	00	562	19	5
569	571	564	571	577	574	569	569	570	570	19	39	580	11	00	559	21	6
566	571	573	573	573	573	573	572	573	567	4	54	575	10	45	550	25	7
567	571	568	570	575	575	581	573	574	566	22	00	581	9	36	549	32	8
569	572	564	578	579	579	578	578	578	569	20	00	579	12	00	553	26	9
579	578	581	582	582	582	581	580	581	576	23	45	585	10	20	568	17	10
579	576	575	575	577	581	581	581	581	575	2	00	581	9	32	559	22	11
580	582	579	578	579	580	580	581	582	575	17	00	582	8	27	558	24	12
575	576	578	580	580	579	578	579	580	575	0	00	582	8	00	566	16	13
579	578	577	574	574	574	574	576	575	572	2	30	581	9	48	556	25	14
572	574	576	573	572	570	571	573	579	567	24	00	579	9	34	541	38	15
577	579	580	580	578	572	573	575	577	574	3	33	591	9	00	562	29	16
580	(580)	(580)	(579)	(579)	(578)	578	577	576	575	3	00	581	8	00	561	20	17
573	585	585	582	579	575	573	582	572	573	17	24	587	8	51	557	30	18
568	576	579	578	574	572	573	572	571	572	6	00	581	10	00	563	18	19
561	567	570	571	570	569	569	(569)	(569)	565	6	00	575	11	40	551	24	20
569	571	576	577	579	578	575	575	573	...	20	00	579	11	46	550	29	21
574	573	574	582	583	581	583	574	573	572	20	00	583	12	00	564	19	22
563	567	568	573	574	574	575	574	574	569	6	00	575	10	00	562	13	23
568	566	565	564	564	565	565	566	566	567	0	42	577	12	30	557	20	24
560	565	565	566	567	567	567	570	571	564	24	00	571	9	00	556	15	25
564	568	566	566	566	566	563	564	567	562	1	00	571	9	00	551	20	26
569	572	576	572	569	570	567	564	573	569	12	00	579	7	57	558	21	27
571	585	586	586	585	584	583	574	584	577	18	00	586	1	47	554	32	28
584	585	582	580	580	578	577	581	577	579	0	12	595	0	56	560	35	29
573	573	575	575	574	572	571	572	572	575	2	06	589	9	37	562	27	30
571	570	570	568	568	567	567	567	567	569	3	00	577	9	00	560	17	31
572	575	575	576	575	575	574	574	574	571							24	
571	572	572	572	573	573	573	574	574	570							19	
570	572	570	570	572	573	573	574	574	569								

NOVEMBER, 1914.

34000 γ PLUS TABULAR QUANTITIES.

Day	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h
1	568	568	570	571	575	576	570	562	546	561	555	559	563	563	563
2	564	566	572	568	567	569	565	555	559	559	559	558	554	555	557
3	563	563	562	555	567	567	565	560	555	556	559	558	561	561	561
4	567	566	565	566	577	578	571	565	561	560	559	563	565	553	568
5	560	562	564	563	569	569	569	563	555	560	561	563	563	567	568
6*	578	575	576	576	576	576	576	574	572	571	569	569	572	568	567
7	575	575	570	574	575	569	565	561	553	552	555	557	558	557	556
8	572	572	568	568	567	567	567	565	560	556	556	557	559	559	556
9*†	568	569	569	567	568	570	570	561	557	556	556	556	560	558	565
10	578	576	575	575	573	572	573	569	563	564	570	575	576	583	579
11	579	580	575	576	575	577	576	574	570	574	576	572	578	577	576
12*	573	572	572	571	570	570	563	559	561	560	566	556	559	567	571
13	573	574	575	574	574	574	572	570	568	570	573	575	574	575	579
14	579	585	580	580	580	579	579	575	563	562	563	566	566	568	570
15	581	581	581	581	578	580	574	569	562	557	558	556	565	561	571
16	576	585	587	587	588	587	587	582	583	581	574	574	573	574	575
17	585	587	587	590	591	593	592	588	580	573	573	573	571	573	584
18	581	581	584	584	584	590	590	584	582	582	582	579	571	577	576
19	579	583	585	585	582	586	587	585	579	570	567	561	559	569	574
20*†	578	577	577	577	581	583	583	579	576	571	571	569	570	571	573
21*†	574	574	573	573	573	574	574	573	566	557	557	557	558	563	562
22*†	576	576	575	574	572	571	572	572	569	568	567	567	568	571	572
23*†	574	574	575	574	571	573	577	575	571	571	571	573	575	579	580
24*	579	578	577	576	575	576	575	572	570	567	566	559	558	564	569
25*	572	574	575	576	575	577	579	578	574	571	571	575	577	579	575
26	583	583	584	584	583	581	581	580	573	571	571	571	570	586	585
27	596	599	598	588	586	591	582	574	569	568	570	571	572	575	583
28	587	590	589	595	596	596	595	592	586	580	582	582	584	584	589
29	585	587	588	587	587	586	586	581	569	566	560	568	571	570	579
30*	583	583	583	585	584	585	581	576	570	567	573	574	570	570	581
Mean.....	576	577	577	577	577	578	577	572	567	566	566	566	567	569	572
Mean*.....	576	575	575	575	574	576	575	572	569	566	567	566	567	569	572
Mean†.....	574	574	574	573	573	574	575	572	568	565	564	565	566	568	570

DECEMBER, 1914.

34000 γ PLUS TABULAR QUANTITIES.

1*	583	584	585	585	584	584	583	579	572	568	559	568	570	578	585
2*†	585	585	585	586	585	586	586	578	571	568	570	571	571	576	581
3	580	583	587	588	588	590	590	587	585	580	577	574	574	574	574
4	589	587	589	590	593	598	598	586	583	576	572	575	580	578	577
5	578	576	576	577	580	582	584	579	576	575	575	575	576	577	578
6	578	579	579	579	579	578	581	579	573	561	560	562	563	566	577
7	581	571	577	576	576	576	587	581	574	562	559	568	569	569	567
8	580	581	585	584	584	580	584	580	579	578	570	567	568	571	571
9	578	577	578	575	576	576	580	574	572	569	565	562	565	575	575
10	582	584	583	580	578	578	578	576	574	575	575	576	576	576	578
11	581	581	580	579	577	577	577	578	578	569	568	569	574	573	580
12	582	584	583	581	578	577	579	577	571	570	566	567	576	576	580
13*†	587	587	587	587	586	586	580	576	575	574	572	568	573	576	579
14*	587	589	589	590	590	588	588	585	577	575	568	564	567	576	586
15*†	585	590	590	590	590	589	590	582	579	571	568	570	578	585	587
16	582	583	583	585	587	587	586	579	575	570	566	564	575	575	574
17	586	586	587	595	587	588	587	586	576	580	579	572	575	584	587
18	582	582	588	589	589	590	591	589	587	582	577	577	569	576	581
19	589	589	587	589	588	587	588	585	582	575	571	563	567	573	575
20*	589	587	586	585	586	586	588	586	579	574	572	574	(576)	(581)	(582)
21*†	587	582	580	580	580	580	586	584	577	569	569	572	573	575	572
22	588	588	587	586	583	585	586	580	575	575	572	572	574	576	577
23*	588	588	588	587	586	583	585	581	576	572	572	577	577	586	590
24	592	592	590	589	586	581	584	578	566	559	565	574	577	578	581
25*	591	589	589	587	584	585	585	583	579	576	566	577	576	583	578
26*†	585	585	584	582	582	582	581	581	573	567	556	562	572	575	576
27	586	586	585	586	586	585	583	576	566	554	544	549	557	570	578
28	589	591	589	587	590	581	583	578	570	566	563	575	574	574	591
29	588	589	587	589	589	587	586	577	571	563	563	565	572	576	586
30	588	588	588	589	587	587	586	585	573	553	561	561	574	575	581
31	583	585	583	586	586	586	585	582	570	550	560	571	573	575	576
Mean.....	585	585	585	585	585	584	585	581	575	570	567	569	572	576	579
Mean*.....	587	587	586	586	585	585	585	582	576	571	567	570	573	579	582
Mean†.....	586	586	585	585	585	585	585	580	575	570	567	569	573	577	579

* Ten least disturbed days.

† Five international quiet days.

NOVEMBER, 1914.

34000r PLUS TABULAR QUANTITIES.

16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean	Maximum			Minimum			Range	Day
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	h	m	γ	h	m	γ	γ	
564	570	571	569	564	564	563	563	564	565	6	00	576	9	00	546	30	1
560	572	573	572	569	567	564	563	564	564	3	17	573	13	00	554	19	2
564	576	576	577	573	576	575	572	567	565	20	30	578	8	44	553	25	3
563	570	570	569	570	571	570	569	563	567	6	00	578	2	16	558	20	4
578	577	579	580	580	580	579	579	576	569	20	34	584	9	00	555	29	5
571	574	573	574	575	575	574	575	575	573	1	00	578	15	00	567	11	6
555	559	563	562	570	572	573	573	572	565	1	25	576	9	45	551	25	7
557	563	567	567	567	567	568	568	568	564	2	00	572	15	00	556	16	8
568	571	574	574	575	576	576	577	577	567	24	00	577	10	00	556	21	9
577	574	574	572	570	576	579	579	579	574	14	00	583	10	15	561	22	10
587	584	583	577	580	580	582	580	579	578	16	00	587	8	49	567	20	11
570	570	566	566	564	566	569	567	571	567	0	00	579	12	00	556	23	12
581	585	581	580	579	577	577	579	578	576	17	00	585	9	00	568	17	13
576	579	575	582	584	582	582	580	578	576	2	00	585	10	06	562	23	14
576	572	572	570	570	570	569	565	570	570	2	00	581	12	00	556	25	15
586	586	587	583	584	583	583	580	581	582	5	00	588	0	00	570	18	16
587	589	584	585	585	582	582	583	582	583	6	00	593	13	35	569	24	17
580	586	587	588	587	585	581	579	580	582	6	00	590	13	00	571	19	18
577	581	584	585	585	585	585	586	583	579	7	00	587	12	44	557	30	19
573	574	577	577	579	579	578	578	577	576	7	00	583	12	00	569	14	20
564	572	575	576	578	579	580	578	577	570	22	00	580	10	35	555	25	21
572	571	572	573	573	575	575	575	575	572	0	00	577	11	00	567	10	22
577	575	576	576	576	576	578	579	579	575	15	00	580	10	00	571	9	23
571	569	569	571	571	569	568	568	571	570	1	00	579	13	00	558	21	24
572	582	576	576	575	576	576	579	583	576	24	00	583	10	00	571	12	25
587	587	578	575	576	576	579	578	588	580	24	00	588	13	00	570	18	26
587	588	589	586	586	586	587	590	588	584	2	18	600	10	00	568	32	27
594	587	587	584	577	576	576	577	583	586	6	00	596	22	00	576	20	28
581	584	586	583	581	580	577	577	579	579	5	07	590	11	00	560	30	29
583	583	583	583	583	581	578	578	578	579	6	00	585	10	00	567	18	30
575	577	577	576	576	576	576	576	576	574							21	
572	574	574	575	575	575	575	575	576	573							16	
571	573	575	575	576	577	577	577	576	572								

DECEMBER, 1914.

34000r PLUS TABULAR QUANTITIES.

16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean	Maximum			Minimum			Range	Day
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	h	m	γ	h	m	γ	γ	
589	587	587	586	586	583	581	581	581	580	16	00	589	11	00	559	30	1
583	587	587	587	587	584	580	580	583	581	18	00	587	10	00	568	19	2
574	576	581	591	591	586	582	580	582	582	19	00	591	12	40	571	20	3
578	576	576	576	574	571	567	571	575	581	7	00	598	22	00	567	31	4
578	577	578	578	578	577	577	577	577	578	7	00	584	0	00	575	9	5
573	569	573	576	574	572	572	574	580	573	7	00	581	11	00	560	21	6
569	570	570	579	581	581	580	580	581	574	7	07	590	10	50	555	35	7
573	573	575	577	576	579	579	579	579	577	3	00	585	12	00	567	18	8
576	571	574	576	577	577	578	579	581	574	24	00	581	12	00	562	19	9
580	580	580	580	579	579	578	579	580	578	2	00	584	9	00	574	10	10
582	582	578	577	575	574	574	582	582	577	13	00	582	11	00	568	14	11
582	582	580	578	580	580	577	578	580	578	2	00	584	11	00	566	18	12
579	585	586	581	580	579	580	581	581	580	3	00	587	12	00	568	19	13
588	587	584	583	581	580	580	581	581	582	5	00	590	12	00	564	26	14
591	591	588	585	581	581	581	581	581	584	17	00	591	11	00	568	23	15
583	585	585	584	586	584	579	578	579	580	6	00	587	12	00	564	23	16
588	583	590	591	591	591	589	585	583	585	4	00	595	12	15	567	28	17
587	590	591	592	592	591	589	587	589	586	19	00	592	13	00	569	23	18
584	587	586	587	589	589	589	589	589	583	0	00	589	12	00	563	26	19
(582)	582	589	590	591	591	590	590	590	584	20	00	591	11	00	572	19	20
576	576	578	584	586	588	588	588	588	580	0	00	590	11	00	569	21	21
586	586	586	585	584	588	588	588	588	583	21	00	588	11	57	569	19	22
589	584	583	581	583	585	586	588	590	584	24	00	590	10	30	571	19	23
587	581	580	580	581	581	583	586	589	581	2	00	592	10	30	558	34	24
578	583	584	584	581	579	579	580	584	582	1	00	591	11	15	562	29	25
577	578	578	578	578	578	579	579	583	577	2	00	585	11	08	555	30	26
577	579	576	576	574	579	579	580	585	575	5	00	586	11	33	542	44	27
591	592	592	589	588	587	590	588	587	584	4	35	598	10	33	561	37	28
588	588	588	588	586	586	585	584	585	582	4	00	589	10	00	563	26	29
579	579	585	585	584	580	579	578	583	580	4	00	589	10	19	552	37	30
583	583	586	583	582	582	577	582	575	578	4	33	587	10	00	550	37	31
582	582	582	583	582	582	581	582	583	580							25	
583	584	584	584	583	583	581	582	583	581							24	
581	583	583	583	584	583	581	582	583	580								

EARTHQUAKES.

A Bosch-Omori seismograph has been in operation since September, 1903. It consists of two pendulums, one recording north-south motion (N) and the other recording east-west motion (E). In the following table the times are Greenwich mean time counted from midnight.

Period of pendulums.

	N	E
January to March, 1913.....	^s 20.0	^s 20.0
May, 1913, to April, 1914.....	19.4	19.9
May to December, 1914.....	21.1	21.4

Magnification: 10.

Steady mass: 10-12 kg.

Register of earthquakes recorded at Porto Rico.

No	Date	Com- ponent	First P. T. begin	Second P. T. begin	Large waves begin	Maximum	End of principal portion	End	Maximum amplitude
	1913.		<i>h m s</i>	<i>h m s</i>	<i>h m s</i>	<i>h m s</i>	<i>h m</i>	<i>h m</i>	<i>mm</i>
289	Jan. 16	N	18 57 54	19 01 47	19 05 33	19 10 23	19 13	19 26	0.2
		E	18 58 00	19 01 85	19 04 51	19 08 25	19 14	...	0.1
290	Mar. 8	N	...	16 02 21	16 05 15	16 10 30	16 14	16 22	0.5
		E	16 00 03	16 02 44	16 05 00	16 10 19	16 13	16 19	0.4
291	14	N	9 05 16	9 09 25	9 15 35	9 29 35	9 52	10 50	0.5
		E	9 05 49	9 09 46	9 15 15	9 34 52	10 18	10 55	1.0
292	31	N	...	...	4 31 56	4 35 54	4 45	...	0.2
		E	...	...	4 27 25	4 42 33	4 51	...	0.2
293	May 15	N	6 39 18	...	6 39 30	6 39 50	6 40	6 46	0.6
		E	6 39 14	...	6 39 26	6 39 42	6 40	6 46	0.5
294	24	N	23 39 30	23 43 04	23 49 36	23 50 45	23 56	...	0.2
		E	23 39 22	23 42 36	23 47 14	23 48 28	23 52	...	0.3
295	June 14	N	8 36 02	8 47 42	8 53 00	8 54 12	9 05	...	0.2
296	14	N	...	10 09 00	10 13 25	10 15 50	10 18	...	0.1
297	21	N	...	...	5 04 55	5 04 56	5 05	...	0.3
		E	...	...	5 04 55	5 04 56	5 05	...	0.5
298	22	N	14 13 57	14 24 14	14 33 40	14 46 51	14 48	15 17	1.0
		E	14 13 44	...	14 34 00	14 41 42	14 49	15 09	0.4
299	26	N	5 17 18	5 25 04	5 32 50	5 33 42	6 26	7 35	0.8
		E	5 16 44	5 25 56	5 32 24	5 33 14	6 04	7 26	1.9
300	July 24	N	8 59 11	...	8 59 27	8 59 36	9 00	9 08	8.4
		E	8 59 08	...	8 59 24	8 59 36	9 00	9 07	6.6
301	28	N	5 51 05	5 54 09	5 55 49	6 01 05	6 07	6 16	0.6
		E	...	...	5 56 33	5 58 00	6 04	...	0.2
302	Aug. 6	N	22 21 44	22 27 16	22 32 26	22 37 33	22 43	23 23	70+
		E	22 22 42	22 27 24	22 32 58	22 37 33	22 40	23 05	14.5
303	Oct. 2	N	4 22 27	4 25 56	4 28 15	4 29 35	4 34	5 00	0.9
		E	4 22 27	4 25 54	4 28 05	4 29 03	4 33	4 45	1.2
304	4	N	22 09 44	22 13 08	22 17 20	22 18 20	22 23	...	0.1
305	14	N	8 25 32	...	...	9 05 00	...	...	0.2
		E	8 25 15	...	...	9 05 00	...	...	0.2
	1914.								
306	Jan. 30	N	3 45 20	3 52 55	4 03 40	4 11 24	4 13	4 48	2.9
		E	3 45 48	3 56 54	4 04 54	4 06 47	4 12	4 32	0.5
307	Feb. 26	N	5 06 14	5 10 37	5 13 35	5 24 24	5 27	5 30	0.2
		E	...	5 10 37	5 13 35	5 14 00	5 17	5 21	0.3
308	28	N	5 07 38	...	5 09 42	5 12 00	5 14	5 19	0.5
		E	5 07 40	...	5 10 00	5 10 28	5 12	5 18	0.2
309	Mar. 30	N	0 48 03	0 52 16	0 58 11	1 00 40	1 10	1 32	3.8
		E	0 47 55	0 53 18	0 57 45	1 00 40	1 11	2 00	14.8
310	Apr. 11	N	...	...	17 35 40	...	18 10	...	0.1
		E	16 52 54	...	17 42 30	...	17 48	...	0.1
311	20	N	13 27 20	13 30 55	13 33 42	13 34 52	13 41	14 10	0.4
		E	13 27 38	13 31 40	13 34 46	13 35 16	13 40	14 20	0.8
312	May 26	N	14 20 58	14 35 56	14 45 10	15 37 55	16 02	16 30	2.1
		E	14 21 09	14 36 29	14 47 10	15 39 35	16 05	16 20	0.2
313	28	N	3 27 35	3 30 19	3 32 56	3 37 50	3 39	4 00	0.6
		E	3 27 24	3 30 24	3 32 15	3 32 55	3 38	3 50	0.1
314	June 25	N	19 52 04	...	20 23 30	20 44 00	20 48	21 00	0.4
		E	19 52 05	...	20 24 45	20 34 00	20 48	21 00	0.2
315	Aug. 3	N	11 28 56	11 30 02	11 31 16	11 31 35	11 36	11 50	0.3
		E	11 28 45	11 30 06	...	11 33 30	11 36	11 45	0.1
316	4	N	...	...	23 36 ...	23 47 05	23 58	...	0.1
		E	...	...	23 35 20	23 40 04	23 53	...	0.1
317	Oct. 3	N	17 23 50	...	17 24 38	17 25 00	17 31	17 40	5.0
		E	17 23 50	...	17 24 38	...	17 32	18 18	69+
318	Nov. 18	N	9 43 12	9 47 27	...	9 53 15	9 55	10 10	0.5
		E	9 43 01	9 47 21	9 51 52	9 53 01	9 58	10 10	0.1

REMARKS.

- No. 291.—Phases indistinct. There is some indication of the beginning of a second earthquake toward the end.
 No. 292.—Beginning and end obscured by wind tremors.
 No. 294.—End obscured by wind tremors.
 No. 297.—Felt in Vieques.
 No. 300.—Local shock, felt distinctly in Vieques.
 No. 302.—Stylus went off the paper at maximum.
 No. 303.—On N the maximum amplitude (2.0 mm) occurred at 4:26:13 during second P. T.
 No. 304.—Nothing on E. Maximum on N occurred at beginning of second P. T.
 No. 305.—No distinct phases; time of beginning may be second P. T.
 No. 311.—The actual maximum on N (0.9 mm) occurred at 13:31:03, during second P. T.
 No. 313.—Amplitudes of 1.2 mm on N and 0.5 mm on E occurred just after the beginning of second P. T.
 No. 316.—Only a few long waves.
 No. 317.—E stylus was off the paper from 17:27.0 to 17:30.5. Martinique earthquake.

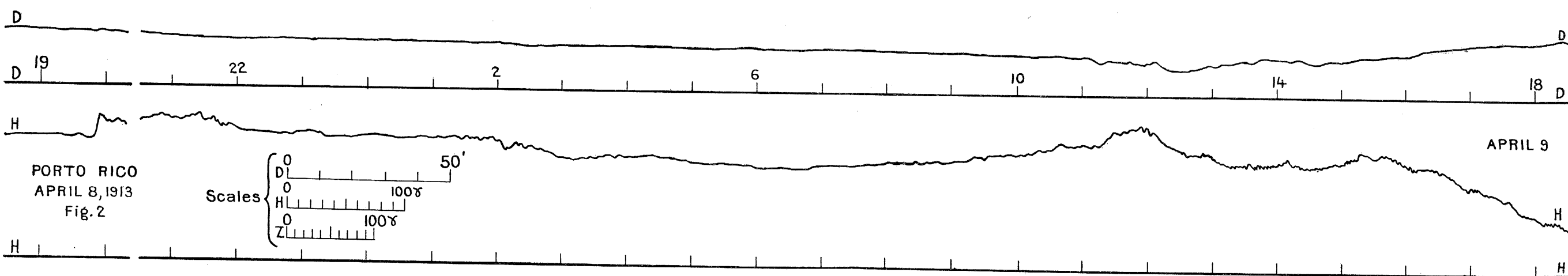
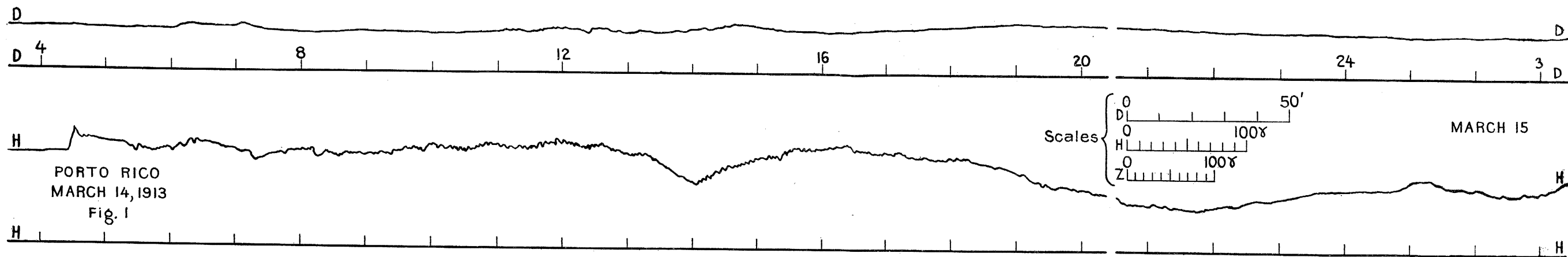
MAGNETIC STORMS.

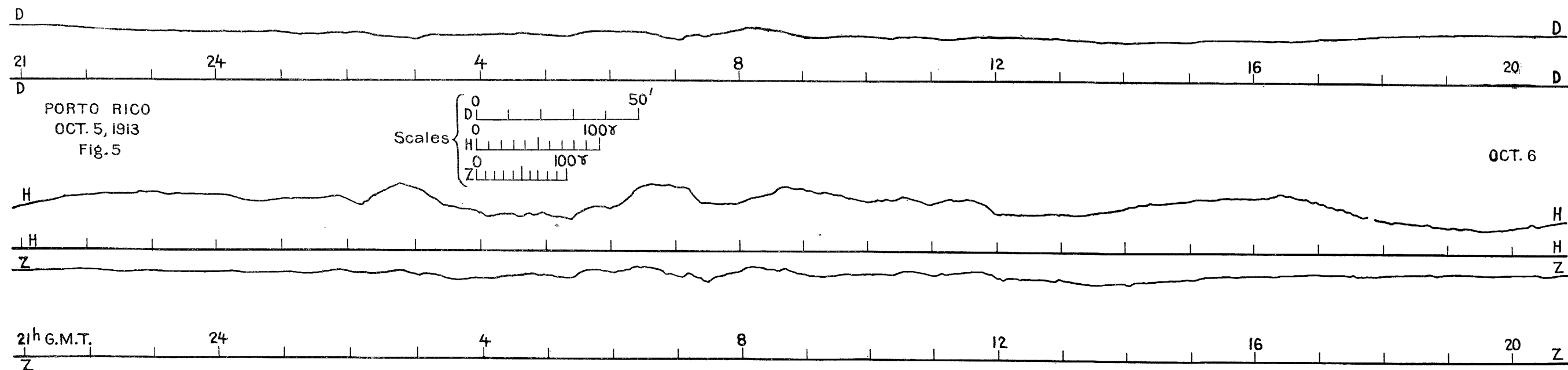
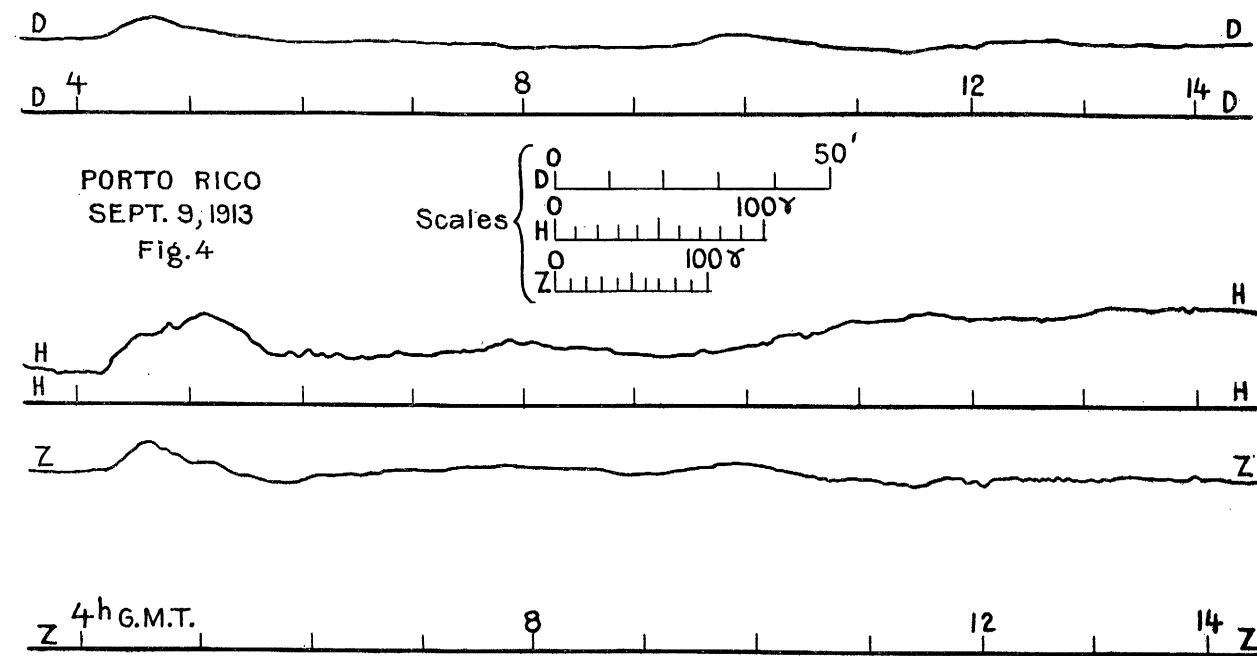
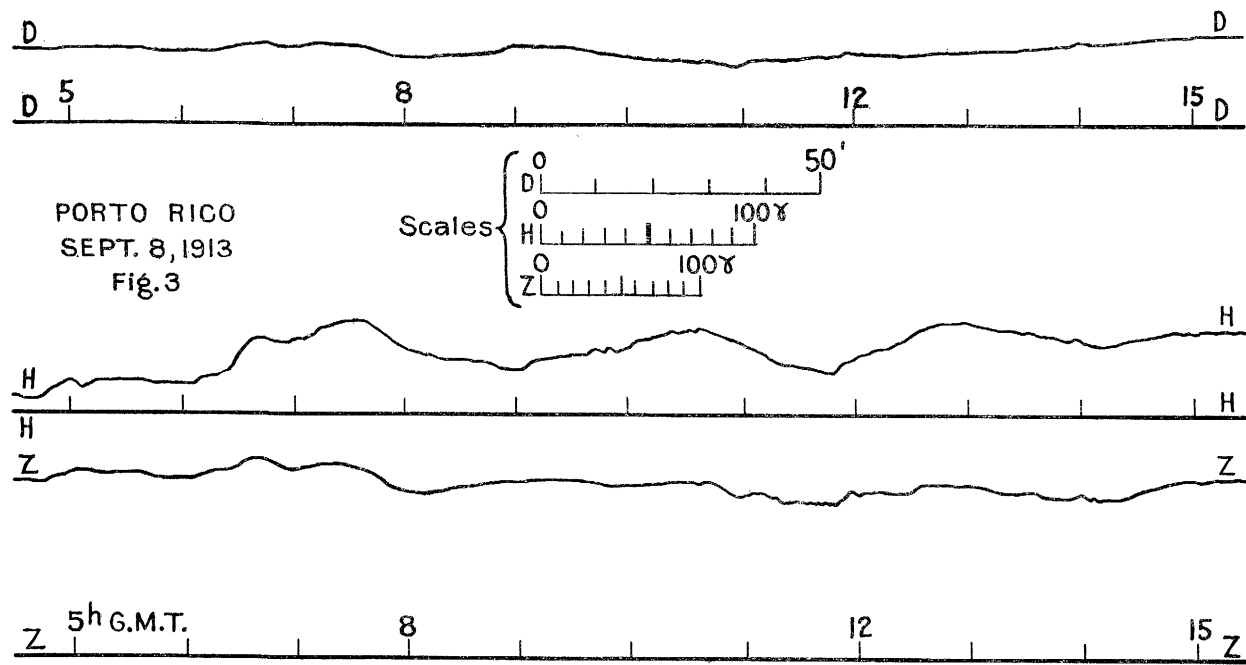
Magnetic disturbances of considerable magnitude were recorded on the days tabulated below. Where a storm began abruptly the time of beginning is given to the nearest minute.

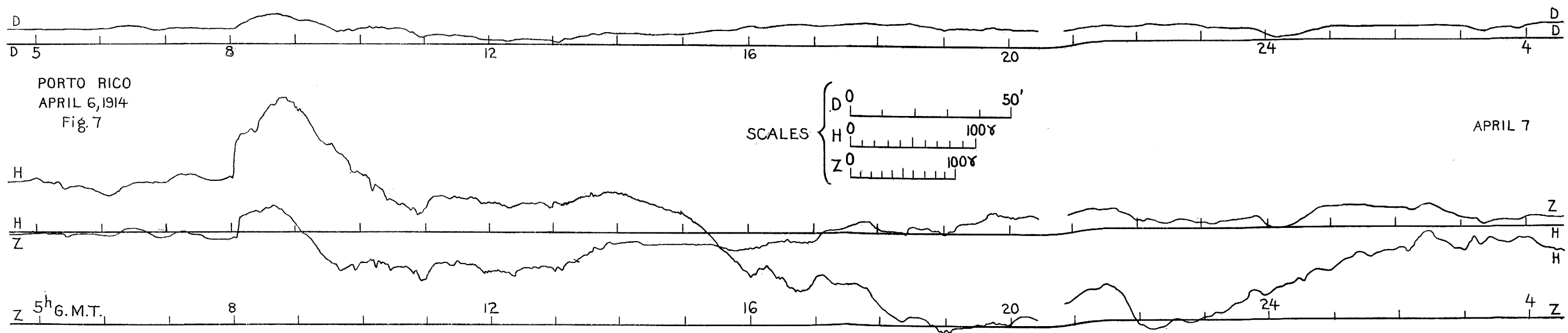
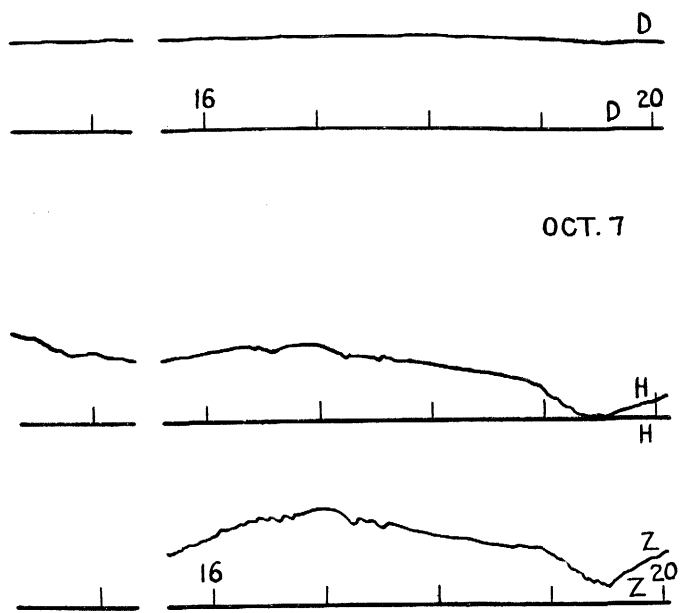
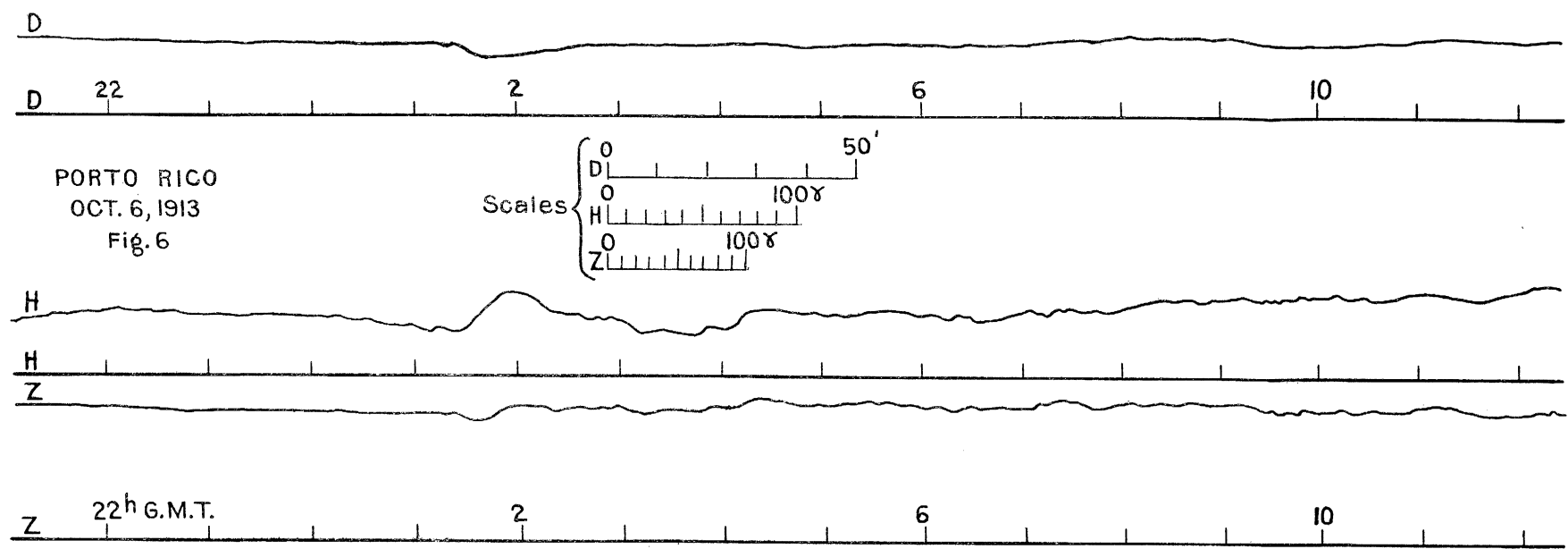
On the succeeding sheets will be found reproductions of the magnetograms showing the principal magnetic storms, reduced to three-fourths the original size. A storm selected for reproduction is indicated in the table by an asterisk after the date. An upward motion of the curves corresponds to increasing west declination, increasing H , and increasing Z . For convenience in comparing with similar reproductions for other observatories, the time scale has been marked for Greenwich mean time.

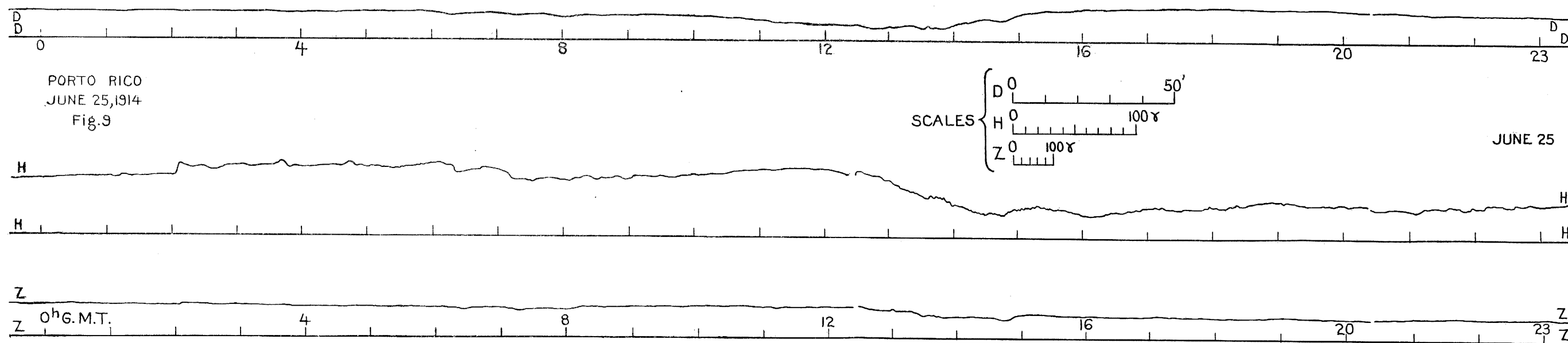
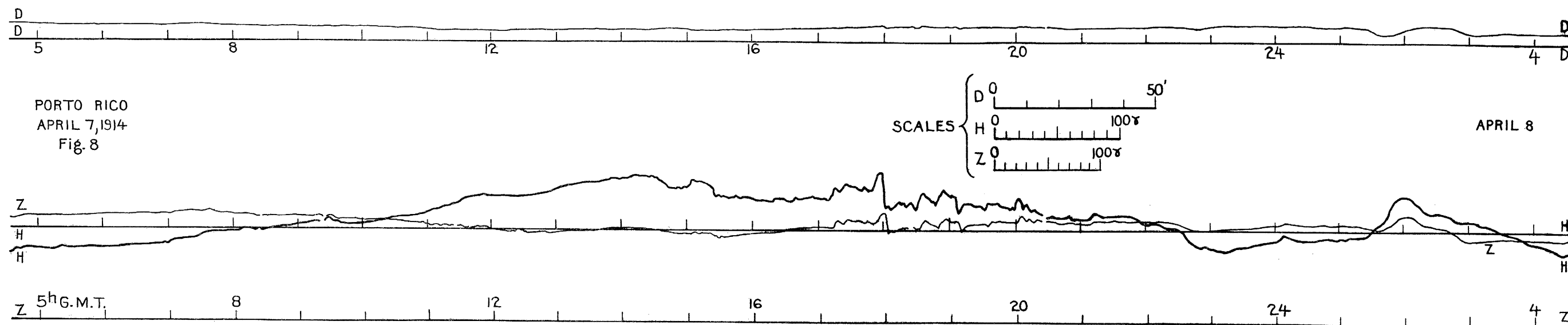
Principal magnetic disturbances.

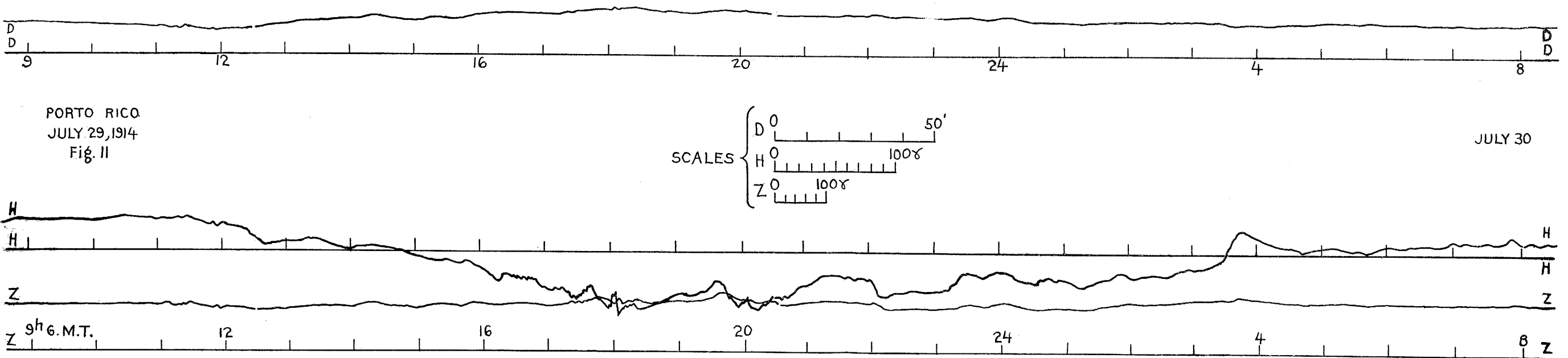
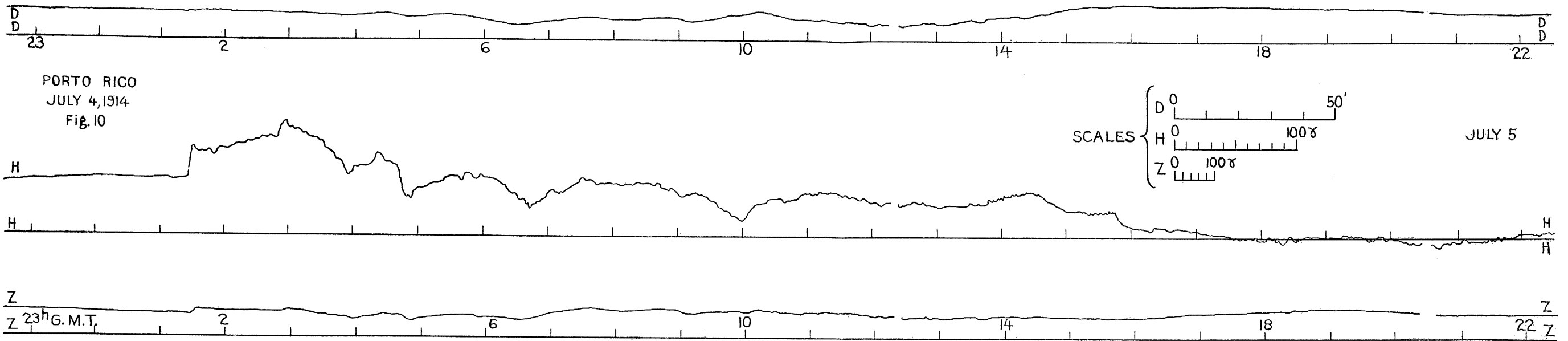
Date	L. M. T. of beginning		Duration in hours	Relative magnitude	Date	L. M. T. of beginning		Duration in hours	Relative magnitude
1913.	<i>h</i>	<i>m</i>			1914.	<i>h</i>	<i>m</i>		
Jan. 17	20		25	1	Feb. 28	13		26	1
29	19	02	20	1	Mar. 5	20		57	1
Feb. 14	1		46	1	17	14		11	1
24	21		52	1	31	21		23	1
Mar. 14*	0	04	98	2	Apr. 5*	19		75	3
29	19		54	1	15	19		30	1
Apr. 8*	15	32	106	2	May 15	0		32	1
14	21		72	1	16	17		31	2
May 4	1		96	2	26	2		24	1
June 1	0		94	1	31	1		45	2
28	13		39	1	June 19	14		24	1
July 12	3		46	1	24*	21	41	136	2
24	10		63	1	July 4*	21	05	53	2
Aug. 8	20		83	1	24	16		66	1
Sept. 5*	17		135	2	28*	17		151	2
22	3		30	1	Aug. 18	17		48	1
Oct. 4*	17		155	2	23	0		20	1
18	3	16	67	1	28	16		64	1
Nov. 1	20		38	1	Sept. 17	19		19	1
6	18		56	1	22	17		40	1
27	8		60	1	27*	0		72	1
Dec. 4	5		24	1	30	17		31	1
24	21		33	1	Oct. 27*	17		46	2
1914.					Nov. 3	0		48	1
Jan. 4	15	42	35	1	10	13		59	1
21	13		35	1	26*	13	22	21	1
					Dec. 26	20		38	1

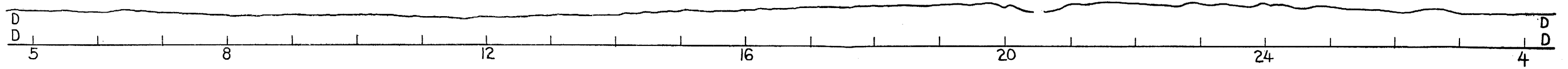






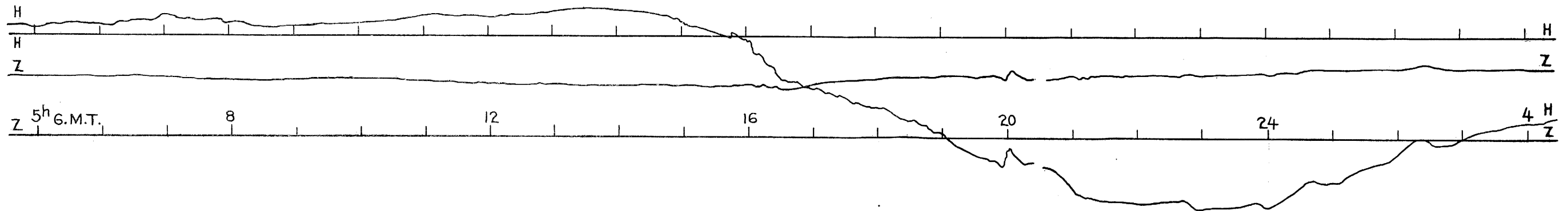
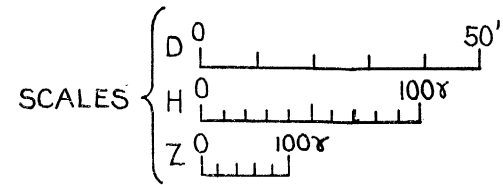




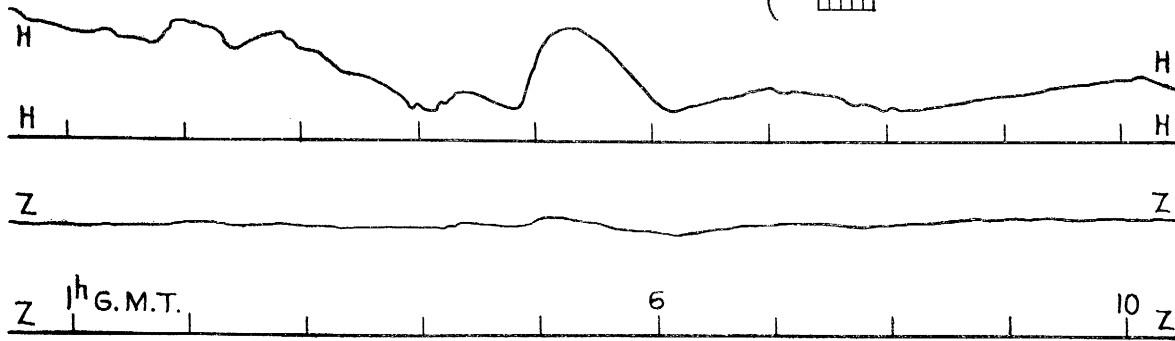
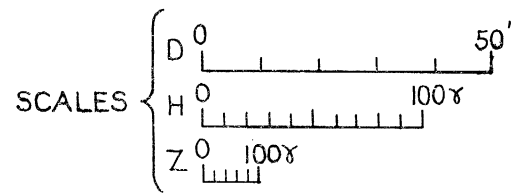


PORTO RICO
SEPT. 27, 1914
Fig. 12

SEPT. 28



PORTO RICO
OCT. 28, 1914
Fig. 13



PORTO RICO
OCT. 29, 1914
Fig. 14

